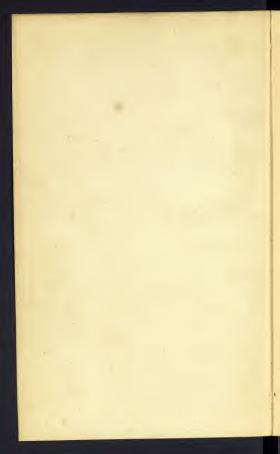


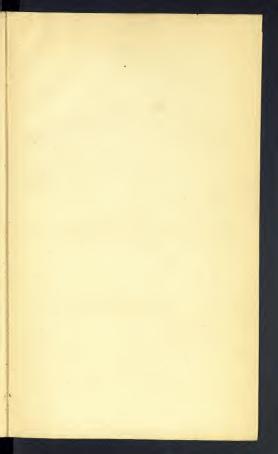
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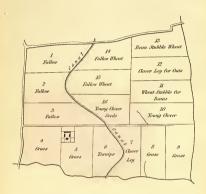
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Plan of the Farm of 2,12 Acres.



BAYLDON'S

ART OF VALUING

RENTS AND TILLAGES,

AND THE

TENANT'S RIGHT

ON ENTERING AND QUITTING FARMS.

EXPLAINED BY SEVERAL

SPECIMENS OF VALUATIONS.

AND

REMARKS ON THE CULTIVATION PURSUED ON SOILS IN
DIFFERENT SITUATIONS.

ADAPTED TO THE USE OF

LANDLORDS, LAND-AGENTS, APPRAISERS, FARMERS, AND TENANTS.

SIXTH EDITION, CORRECTED AND REVISED

BY JOHN DONALDSON,

AUTHOR OF "A TREATISE ON MANURES AND GRASSES."

LONDON:

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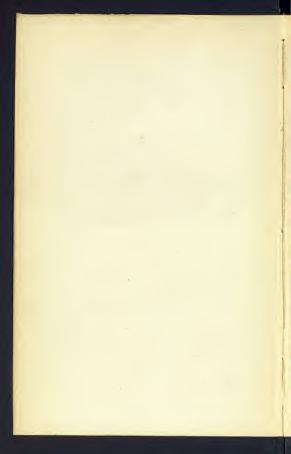
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PREFACE.

The Sixth Edition of this work is now presented to the Public, revised and corrected by the Editor of the last edition, with such alterations as changes in circumstances render necessary. An estate rotation fieldbook has been added to the forms of accompt books formerly published; all which together will, it is hoped, prove useful to persons engaged in agricultural occupations. The chapter on the Tithe Commutation Rent Charge is continued by a very competent gentleman, long engaged in the Tithe Commission, and adds much to the value of the work.

London, January, 1844.



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ART OF VALUING

RENTS AND TILLAGES.

I.

ON THE LEASING AND RENTING OF LAND.

Property in land has been derived chiefly from priority of occupation, and from grants made by persons placed by adventitions eircumstances in situations where the power could be assumed and used of giving to others the possession of it, and from the act of labour subsequently bestowed; and the rights of occupancy thus acquired have been tacitly acknowledged and acquiesced in by the rest of the community. The original grants were very large; and the great feudatories, soon seeing the impossibility of cultivating all their lands, found

it necessary to commit part of them to others, partly from the necessity that ever exists of providing in some way for the subsistence of the inhabitants, and partly from their charter binding them to keep a number of retainers ready for military service, the universal mode of tenure then existing. The course of time and the change of circumstances gradually altered and finally abolished this primitive mode of holding; revolutions, confiscations, sales, and alienations took place, by which the land passed into the hands of a greater number of persons, and varied at the same time the modes of holding possession. The original grants held of the crown, by rendering, in return, chivalry or military services: the lands were divided to others on similar conditions, in villanage, in the most slavish offices, and in soccage, and in rendering corporal services, and a part or the whole of the produce. During the times of holding by military tenure, and for centuries after alterations and di-

visions had taken place, the land was very imperfectly cultivated; the inhabitants were divided into the two great classes of proprietors and slaves or villains: there existed no middle class; and the acknowledgment paid by the vassal to the superior, consisted in personal services and in produce, without any security or forethought beyond the supply of the present emergency. The labourer or cultivator had no inducement to increase the quantity of produce by cultivation; his labour was held of little value; a bare subsistence could scarcely be obtained; for there existed no law to protect the fruits of his industry from the hand of spoliation. As civilisation advanced, the art of cultivation advanced also; for the culture of minds and the culture of lands are nearly related to each other. The giving the vassal, the labourer, or the cultivator of the soil, an interest in the improvement of it for his own benefit, by granting him an undisturbed possession and use of a quantity of

land upon the condition of giving in return certain acknowledgments agreed upon between the superior and himself, was the first great breach effected in the system of feudal tyranny that had so long enslaved both the bodies and minds of men, and which had retarded both directly and indirectly the physical and moral improvement of the human race. From that time may be dated the commencement of the art of agriculture; the breach widened by degrees; and though many vestiges yet remain to be obliterated, improvements have progressed at a slower or quicker pace as they have been retarded or advanced by necessary and contingent circumstances. civilisation advanced, and capital multiplied, personal services and payments in kind were gradually abolished; and a defined relationship between the superior and the cultivator being by degrees established, and the law having lent its aid to support that relationship, a more steady and more profitable state of things was gradually obtained, which though yet capable of very great improvements, is, nevertheless, clearly understood and acted upon, and well calculated to promote the interests of all parties concerned.

As was before observed, land is generally held "free" of the crown, or for a nominal acknowledgment; and the proprietors let it in parcels to others, to be cultivated on condition of giving in return a part of the profits derived. The agreement between the possessor and the cultivator is called a "lease" (from laisser, Fr. Spelman), and is defined to be a contract between a lessor and lessee, for the possession and property of lands, &c., on one side, and a recompence for rent on the other: Bacon, Abridg. tit. "Leases." The usual words of operation in a lease are, "Demise, grant, and to farm, set;" and it must exist for a less time than the lessor holds, or it will be an assignment or alienation. Farm, or "feorme,"

is an old Saxon word signifying provisions; because anciently the rents were paid in produce, and were altered by the introduction of money. A farmer, or "firmarius," was one who held his lands upon paying a rent or "feorme;" and by a gradual departure from the original sense, the word "farm" is brought to signify the very estate or lands so held upon paying "feorme" or rent. The word "lease" is sometimes, though improperly, applied to the estate; i.e. the title, time, or interest the lessee hath in the thing demised: and then it is rather referred to the thing taken or had, and the interest of the taker therein; but it is more accurately applied rather to the manner or means of coming or attaining to the thing letten. A lessor, or the person who grants a lease, must have a free and undisputed title to the thing to be demised, must have attained to man's estate, and be every way capable of managing his own business. A lease may be by word of

mouth, and is called "Lease Parol;" or by writing, and is called "Lease by Indenture;" and may endure for one or more years, as may be wished. By the Statute of Frauds, a lease must be in writing, and by indenture, and signed by the parties or by authorised agents, or the lease will operate only as a lease at will, except for leases not exceeding three years: 29 Car. II. cap. 14. A written agreement to enter into a lease when required, has been held as a good lease. By ancient law, the estate of the lessee might be at any time defeated by a common recovery suffered by the tenant of the freehold, which annihilated all leases for years then subsisting, unless renewed by the receiver, whose title was supposed to be superior to his by whom the leases were granted. But by statute 21 Hen. VIII. cap. 5., the "termor," or the person entitled to the "term" of years, was protected against fictitious recoveries, and his interest rendered secure and permanent.

The word "rent" implies the returns in service, corn, cattle, and money, from the lands demised; and hence the word, from "reditus," or the corrupted "rendita," or, as Fleta tells us, from "retroit, or quotannis redit." Under the feudal system, this return, or rent, consisted in services and in produce, or in any other certain profit. There are three kinds of rents: Rent-services, partly in money and partly in corporal services; Rent-charge, where lands are made over to another for a certain term, with a sum of money reserved as a yearly payment, with a clause of distress for non-payment charged on the land, and hence "rentcharge:" Rent-sec, or dry-rent, has no clause of distress.

Leases have been granted for the term of a life and for lives, and often for a fine or a sum of money paid at stated periods. A sort of holdings also exists in the shape of copyholds by heriots, and by fines at deaths, or at fixed times, which are the remains of vassalage tenures, and arose from the alienations made at different times from the large fiefs or grants. The stipulated burdens or acknowledgments being duly discharged, these holdings do not operate against the advance of improvement, as they are not extinguishable by the death of either party; but the former case operates directly against any improvements which would immediately increase the fine imposed. This mode of leasing prevails mostly on the lands belonging to ecclesiastical establishments, and is yet followed, owing mostly, it would appear, to the peculiar situation in which the lessors are placed: it is hurtful in a great degree. The endurance of leases in ancient times is not correctly known: 40 years has been mentioned, and even 100; but such terms are now ineligible, owing to the great alterations in the system of cultivation, the improvements that are constantly taking place, and the fluctuations that occur in all human

affairs. Two modes of letting land now principally prevail: a holding for one year, extinguishable at the end of the year, by a notice of six months being given to that effect by either party; and by a lease for a certain term of years mentioned in the agreement.

The relative superiority of holding by lease or by a yearly tenancy has been much disputed; but all the arguments pro and con. may be brought within a very small compass; for it is contrary to human nature to suppose that any person will expend his capital in improving the property of another, without having a prospect or a security of himself or his heirs deriving the benefit. Many examples, no doubt, exist of a long tenancy and of excellent cultivation under a holding by the year; but these form exceptions only, and depend wholly on the good will or caprice of the owners of the land. The grantor of a yearly holding may be every thing that can be wished, but the

next possessor is unknown; and if any expenditure has been made by the farmer, and a removal takes place, and if no agreement has been made, or no customary usage exists as to allowances in such cases, the value of the improvements is lost to him. And the fact is certain, that leases have done more for the advancement of agriculture than any other transaction on record. Cases may occur where it may be necessary to withhold them, and to shorten the duration; but where sufficient skill and capital exist, as is now most generally the case, there can be no just reason for withholding or weakening in that point the stimulus of selfinterest, the most powerful of all the springs of human actions. The most approved practice has now fixed the period of 10 to 25 years as the most suitable for the duration of a lease, in allowing the farmer a sufficient time for making improvements and for remuneration, and also avoiding, by a longer extension, the appearance of alienating the property, and thus depriving the owner of any advantages that a change of circumstances may produce. In the modern acceptation of the word, "rent" is understood to mean that part of the produce of a farm, or its value, which the farmer can afford to give to the proprietor, after paying the expenses of cultivation, and being paid interest on his capital and for his personal occupation. It has been long ago made payable in a certain quantity of the current coin of the realm, and lately a quantity of the staple produce has been agreed upon, but which is convertible into money by an average price. Notice of this transaction will occur in a subsequent chapter.

In ascertaining the value of leasehold property, there must be considered the peculiar nature and conditions of the lease, and the difference between the lease-rent and the full or actual rental value; as all sorts of leases where the rent payable is not equal to the just or true rental value at the

period of their being sold, lessen the value of the land, and are obviously an encumbrance in every point of view. The most approved mode of managing the business is, after ascertaining the difference between the lease-rent and the full rental value, encumbered with the same outgoings and repairs as the lease-rent, to multiply it by the number of years that are unexpired, deducting the product in full from the value of the land free from such encumbrance; and from the product thus found, to further deduct half the interest thereof during the said number of years, together with that of one half-year over, where the rent is payable half-yearly, and one year where it is payable annually; as all that a purchaser of this kind of property has a right to expect, is that of receiving the full rent for his land during the continuance of such lease or agreement.

Thus if the difference occasioned by the lease be 15*l.*, and supposing 10 years of the lease to run, the product would be

150l.; and supposing the payments to be made yearly, the interest to be deducted would be the half of 75l., the interest of 150l. for 10 years at 5 per cent., with the half of 7l. 10s., one year's interest, making together 411. 5s., which deducted from 150l. leaves 108l. 15s., the clear sum to be deducted as an encumbrance. The tenant pays what the lease stipulates; and if the seller were to make up the remainder at the end of every 6 or 12 months, the purchaser would receive the full rent, the same as if no encumbrance had existed. Thus the seller the first year would hold the whole of 150l. in his hands, the interest of which is 71, 10s.

		25		æ s.
The first year holds	-	- 150	interest	7 10
second year	-	- 135	_	6 15
third year	-	- 120		6 0
fourth year	-	- 105		5 5
fifth year	- ,	- 90	-	4 10
sixth year	-	- 75	_	3 15
seventh year	-	- 60		3 0
eighth year	-	- 45	-	2 5
ninth year	-	- 30	_	1 10
. tenth year	-	- 15		0 15
· ·			-	
			£	241 5

The present value of a lease of a 100*l*. let 10*l*. under value, and for 10 years, is as follows:—

Present value of 11.	annuity for	10 years	£
at 5 per cent., by	De Moivre's	tables .	7.721785
Multiplied by 10%	-		. 10

Present value - - - £77·217350

Being an annuity of 10*l*. for 10 years, on the supposition of raising 10*l*. yearly from the farm above the stipulated lease-rent.

TT.

TIMES OF ENTRY. —ADVANTAGES AND DIS-

Different periods of the year have been adopted in entering on the possession of land, none of which are exempt from the objections that appear to be inseparable from all human arrangements. No time of the year can be mentioned without corresponding advantages and disadvantages; and this being the case, it only remains to choose the least evil, as we may suppose that experience in such matters has by this time fixed on the most suitable and most proper. The 1st of January is by some preferred on account of its commencing the year; and the 2d of February, or Candlemas-day, is the most ancient, and yet a very common time of entry to land, and the 13th of May to the houses and yards. These periods

are inconvenient, on account of being separate, and in not allowing the in-coming tenant the full use of the buildings at the busy time of the year. In cases of removing from a distance, the inconvenience of having property divided at two places for the space of three months, is severely felt. The 25th of March, or Lady-day, is a more convenient time for entering to the lands and buildings together. Neither of these terms of entry afford a sufficient opportunity to the in-coming tenant, of ploughing and preparing the land for the ensuing crops; but liberty is usually reserved of accommodation for a team of horses for that purpose; but this provision, though of great benefit, is far from being equal to the work that falls to be performed. Lady-day is the more suitable, as the winter is then over, and the green crops will be all consumed, and the straw of the previous crops will be made into manure. It also suits for sowing the oat and barley crops. The

13th of May is a very general time of entry to the lands and houses together, with right of accommodation for one team to get on with the winter ploughing and other necessary work. The Michaelmas entry to lands and houses together takes place in September, and Martinmas on 22d November, and afford the incoming farmer the full benefit of the winter preparation, but subject him on the other hand to a heavy valuation for the work of the previous summer.

The most common terms of entry are Lady-day and Michaelmas, though in many places Candlemas is also used, and Mayday is principally adopted in the northern parts of the kingdom. The most opposite customs prevail in districts but a very little distance removed from each other. In some places, dung and straw are not paid for, but are left free for the use of the incoming tenant, and hay may be removed, and sometimes not. In a few cases, hay

the In raw be-

and straw may be removed any where, the crops being often sold by auction. other instances, all hay, dung, and straw are valued and paid for, and the straw belongs to the in-coming tenant for his threshing and carrying the crop. In many cases, the use of the sheds and barns, and a part of the dwelling house is retained for six months, and often for a whole year, after the expiry of the lease, in order to manufacture the last crop; the farm thus having two occupiers, and giving occasion to unpleasant collisions. The two main difficulties that attend every term of entry, is the use of the last or growing crop, and the use and preparation of the land that falls to be cultivated in the year of expiration. period of the year can be found that would remove all the existing objections; for the processes of cultivation are so intermixed and dependent on each other, that at any time of the year that can be named, there would remain, crops growing or unconsumed,

or labour performed by the out-going tenant, of which he has not derived the benefit, and for which he must be remunerated. At Lady-day we often find that the in-coming tenant cannot go on the land to do any work without leave from his predecessor, and in other cases he enters at Candlemas with accommodation for one team. But even with this provision, the winter and spring work is neglected, and the spring crops are often too late when allowed to be sown by the in-coming tenant. Sometimes the crops are sown by either tenant; when sown by the out-goer, the in-comer is not always bound to take them by valuation, and in that case they are cut and used by the outgoer, he paying the rent for the current half year. In some places the out-goer has two-thirds of the wheat crop, and one-half of the Lent crops for his share, and the incomer has the remainder for cutting and manufacturing. It is sometimes covenanted, that winter ploughing is to be performed

and paid for, and in other cases it is entirely optional on either side. It is even stipulated that the out-going tenant shall not prepare for, or sow wheat, and that he will not be paid for any work done by him; a direct injunction to mismanage the land. The greatest objection to a Lady-day entry is, that it gives an in-comer no crop for a year and half, where he is not allowed to sow the spring crops; and by the time he has reaped a crop, he will have paid a year's rent according to the very general custom of having a credit of six months. But the spring crops are most commonly sown by the in-comer, and the crop of wheat and the winter ploughing only remain to be arranged. This entry is advantageous in happening at a time when the last year's produce of hay, straw, and green crops will be nearly all consumed; and if it could be so far generally agreed upon, that no valuation for tillages is due where a crop has been obtained, the autumn sown wheat would

constitute the only item for adjustment. Payment for seed and labour for young grasses is universally understood, and the Lady-day entry is also advantageous in affording no pretext for spring grazing, as the usual season has not arrived.

The entry in May is later in the season, and affords less chance of preparation by winter ploughing. The in-comer can sow no spring crops, and pays one year's rent before reaping any corn produce. If the young seeds are not paid for, they may be eaten till 13th of May; but this custom is usually guarded against, and Lady-day is named as the entry to the seeds, pastures, and meadow lands. The last crops are used by the out-goer, the dung and straw remaining free, and the in-coming tenant affording barn room, and assisting in manufacturing the crop. The winter ploughing is accomplished by a number of the neighbouring farmers sending each a plough on a certain day, by which means a number of acres are turned over, but often very imperfectly, and at an improper season. The
fallows for green crops are too late in being
wrought, the manure is not prepared in
due time, and the work of the season is
deranged. Some little accommodation is
claimed by the in-coming tenant, but wholly
inadequate to effect the work that is necessary, and there is no agreement for
ploughing, or any other work being done

In Michaelmas entries, a liberty is sometimes granted to enter at Lady-day or at Midsummer to prepare the fallows; the out-goer uses the last crops, and keeps barn room till the following May or Midsummer, when the dung and straw are sometimes free, and sometimes paid for. The crops are sometimes taken by valuation, and in many places the in-comer threshes and carries the crop to market, and has the straw and dung therefrom free of charge. The Michaelmas term affords no return of crop for twelve

for remuneration.

months, and is also objectionable in happening at the end of the summer cultivation and thus bringing too much of the annual process into account between the out-going and in-coming tenant. The fallowing for wheat and the whole of the green crops come to be valued, and make the prospect for the next crop to be too much depending on the previous management of the outgoer, and raises a great amount of valuation to the in-comer. If he be obliged to take the grain crops of that year by valuation, the amount is intolerable; but this seldom happens except by his own wish, and even hay is not always covenanted to be taken, though it ought not to be removed.

In contiguous counties, and even on adjoining estates, we find very different customs are observed when a farm changes occupiers; and when the usages of all the counties in the kingdom are brought together, a confused and contradictory mass is presented to our view, in the formation of

which, fashion, caprice, and custom have had the chief direction, for reason and judgment are ever very sparingly introduced into human institutions and arrangements. From a due consideration of the different terms of entry in the above statement, and judging from practical experience, it may be inferred that the most convenient term will be found at Lady-day, allowing at the same time that each of the other terms may be much improved by alterations and wholesome regulations. The main object to be attained is to arrange the change of occupation in such a manner that the least possible derangement may take place in the cultivation of the farm—that the winter ploughing, the preparation of manure, and the sowing of the spring crops may be all performed in proper time. The object next in importance is to give the incomer possession of the land and houses at the same time, in order to remove as much as possible any grounds of misunderstandings, and of unpleasant collisions. But the processes of modern cultivation never ceasing at any time of the year, it is not possible to remove all connection between the two parties, and such connection must be determined by the proprietor, and not left to the option or caprice of the individuals who are differently interested. The fallow for wheat must be prepared by the quitting tenant, and the in-comer is liable for rent and taxes, seed, labour, and manure, if it be paid for by custom; if not, for carting only. If the crops be taken at valuation, rent and taxes will be deducted from the amount. In order that the winter ploughing may be performed at the proper time, accommodation may be provided by agreement at Candlemas, or at 1st of January, for a part of the necessary strength, and the out-going tenant may be bound also by agreement to plough the lands to nearly the term of quitting, on being paid the customary charge, such a part of performance

not to include all the work necessary to be done, so as to interfere too much with his avocations elsewhere. Such an arrangement would carry on the work at the proper season as if no change was intended: the wheat crop being transferred to the in-comer and the spring crops being sown by him the out-goer has nothing further to look after, and the in-comer enters at once into the sole possession. He gets the crops of that year, and consequently pays rent at the expiring of the first six months after entry, and pays none after he quits. If custom would yield and advance a step, and allow no valuation where a crop of any kind has been got, the arrangement would be much simplified; but if valuations must endure, the tillages of fallows and green crops would be valued as usual, and for the labour performed. The crops, if not taken, will be used by the out-goer as usual, and the straw left free. At Lady-day, straw and hay and green crops will be mostly

consumed, and the dung will be in the yards, or carted out and preparing for use. If any hay be left it may be valued, but dung and straw should in all cases be free. Pasturing will be prohibited, except by the usual number of sheep; and payment of seed and labour for young grasses is in all cases understood.

The above plan of entry would appear calculated to simplify the process of changing tenants, and such arrangements are better accomplished and give more satisfaction when they are rendered as simple as possible, and divested of all superfluous and unnecessary ramifications; the cultivation of the farm is provided for at the proper time by an agreement in every case; the out-going tenant quits on one day, lands, houses, crops, and payment of rent, and the in-comer enters at once into the full possession of the farm, and becomes tenant in every sense. The valuation of tillages may be low or as extensive as cus-

tom has ever sanctioned; labour performed, fallowing, and the value of hay never can be omitted; all others may be dispensed with, if we would allow no valuation where a crop has been got, as has been done in many parts of the kingdom. But if custom must prevail, no impediment is offered to its continuance by the plan above proposed.

TIT.

AGREEMENTS.

The articles of agreement by which a farm of land is held, express the obligations entered into by the contracting parties, with the terms of entry and of expiry, and the amount of the profits the owner will derive from such a use of his property. Such contracts should be plain and simply worded, and the terms as few as possible, easily understood and complied with, and wholly free from the technical obscurities of legal phraseology, which never fail to fetter and encumber the farmer with confused and objectionable clauses, render the whole deed perplexed and contradictory, and the fruitful source of litigation. A very general error lies in vain attempts to provide against every possible contingency, which it is impossible to do, both from the

nature of the transaction and from the unforeseen events to which it may give rise. An agreement should stipulate rather what a farmer is not to do than what he is to perform; for as it cannot in every case compel good farming, it may yet prevent much that is bad: much skill and experience are required in laying down such stipulations, especially as to cropping the land, for the judgment and enterprise of the farmer must not be restricted, and at the same time care must be used that the property sustain no damage, especially during the latter years of the lease. An intimate acquaintance with the practice and details of agriculture is essentially necessary to enable any person to prescribe the conditions of cultivation, and it is vain for any one ignorant of such matters to fancy to himself that he can draw an agreement with proper and wholesome restrictions. Any tendency to legal disputes must be cautiously avoided; and on the simple maxim

that "conventio vincit legem," it is an easy matter for any person who is thoroughly acquainted with the business by education and by profession, to express an agreement that shall contain the necessary stipulations and conditions with strict justice to both parties, and without any grounds for cavil and dispute on either side.

A holding at will or by lease differs little in point of the agreement, except in the circumstance of removal at six months' notice before the expiry of the year. In all holdings, the landowner warrants the free and undisturbed possession and use of the lands, houses, yards, and gardens mentioned in the agreement for the time specified, and from the time of entry, whatever time of the year it may be. The proprietor puts all the houses, gates, fences, and ditches into proper repair, and the tenant is understood to accept of them by the taking possession, and the landlord reserves the right of shooting and coursing over the lands;

of cutting and carrying away any timber growing on the farm, of examining the buildings, and of digging and carrying away any minerals which are expressly reserved for the landlord; a compensation being made to the tenant for any damage done to the land or fences in carrying away such timber or minerals, by the valuation of men mutually chosen. On the other side, the tenant binds and obliges himself, his heirs and executors, to fulfil the conditions of the agreement with good faith, to pay the sum of money stipulated as a rent, in equal halves, at the terms mentioned in the lease, and to pay all taxes and assessments, with the exception of the land-tax. The system of cultivation is understood to be the most approved for the soil and locality, with liberty to improve on it, but not to adopt a more scourging rotation; and the taking of two white or grain crops in succession is absolutely and expressly prohibited, and also the selling of hay or straw from the

farm, which must be consumed by live-stock and used as manure, unless where it is agreed that an equal value of dung is brought to the farm in return. Two mowings of hay in one year are also prohibited, and sometimes two successive yearly crops, unless the land be manured in a corresponding degree; and the portion of the farm, if any, to be kept in permanent grass is mentioned by name and in extent, no part of which is to be ploughed except by consent, or upon condition of an equal quantity being laid down in exchange. The agreement also secludes assignees, legal or voluntary, and subtenants, except with the consent of the landlord, and the successor is usually named in the lease. In case of that name or names becoming extinct, the heir at law succeeds, a lease being heritable. The tenant also binds himself to keep houses, fences, gates, stiles, and ditches in tenantable repair; and, in case of holding at will, to remove at the proper term, on

receiving a notice of 6 months; and, in case of a lease for years, a clause is now inserted in the agreement, that the tenant is to quit the lands and houses at the expiry of the lease, without any process or warning whatever, unless the lease has been renewed, in order to prevent any expense and trouble that may arise from a vexatious continuance. The bankruptcy of the farmer during the currency of the lease, and a direct contravening by the tenant of any of the stipulations in the agreement, is held to be an "ipso facto" irritancy of the lease; and a clause is accordingly inserted, binding the farmer to remove at the next proper term, upon such contravention being satisfactorily proved, and, in the former case, declaring the lease to be null and void, and the possession of the farm to be vacant at the first proper term after such bankruptcy has happened. Previous to leaving the farm, the tenant to be paid all customary charges, tillages, and half tillages, and other matters

and things done and left by him in a farming like state, which customary charges were duly explained to him on entering to the lease, and according to which he paid the valuations to his predecessor. From the sum of these allowances, the amount of dilapidations, if any, will be deducted; and, upon the balance being paid by the incoming tenant, or by the landlord to the out-going tenant, the latter quits the farm.

Some other arrangements will be necessary, according to circumstances and localities, such as the allowance for draining granted by the landlord to the farmer, the share of the expense borne by the farmer in the case of erecting new fences, in repairing very old ones and in upholding them, and the liberty reserved by the landlord to plant any part of the land, or to make a new road through the farm. Such things must be expressed where they prevail and are wanted; but the above will be found to contain all the primary conditions.

IV.

ON THE RENT OF LAND.

In order to fix a proper rent on land, it is necessary to inquire into several local circumstances: quality of the soil, whether light or strong; its soundness, whether upon clayey or gravelly subsoil, or upon a very wet or a very dry bottom; if well watered, without being retentive or flooded; a tendency to seed well and to feed soundly; contiguity to markets and to manures; the value of produce in the neighbouring markets, the amount of tithe and taxes, and many other expenses and items which differ almost in every parish.

To apportion fairly the parts of the produce of any farm, which should belong to the landlord and tenant respectively, is undoubtedly a most desirable object, so as not to oppress the farmer on the one hand, nor, on the other, deprive the owner of the just value of his property; and, in effecting this object, some skill and experience are necessary. The relative qualities of the land, the climate, taxes, local situation, cost of labour, and lastly, but most materially, the value of corn and of other produce, should be well considered. Besides these chief points of inquiry, many more might be suggested, which are obvious to every farmer.

A fair rent generally acts as a stimulus to good farming: the cultivator, knowing that profits are to be obtained only by good management, will exert himself in some proportion to the amount he has to raise. Much, however, will depend on the genius and temper of the individual himself; for an easy disposition, finding the rent moderate and obtained with little trouble, will relax in his endeavours, and rest contented with the means that are found to answer the purpose. An active temper, under the same circumstances, will push cultivation to

the utmost, improve the farm, and even secure a competent independence. rents have been reckoned to stimulate the farmer; but a medium must be observed, and the extreme avoided; for, if exorbitantly high, they act as an effectual discouragement, for no man will continue with energy in attempting what he is fully convinced by experience he cannot effect. Such a state of excessive rents is much to be deprecated: it reduces the capital of the farmer, induces him to scourge and exhaust the land, and renders him unsettled, and anxious to remove at the first opportunity. The farm is impoverished, and cannot be let at a fair value, and it must either be improved at the owner's cost or be let at a reduced rent; and, in such cases, both the landowners and the farmers are greater losers, both in profit and in credit, than if a moderate rent had been taken.

The plan adopted by some landlords, of letting their estates to value by the pound, is a strong temptation held out to the valuer to lay on more rent than can be raised by the farmer. When such methods are practised, they invariably lead to bad results. The farmer, who has probably been born and bred on the spot, is unwilling to leave it : he overcrops the land, exhausts his capital, and both interests suffer in the extreme. Most landlords are willing to allow the farmer a fair remuneration for his labour, if it can be ascertained with any degree of truth. This, it is presumed, may be obtained by estimating the expenses incurred, and the profits arising during the whole course of one rotation of crops on different soils. Few valuers incur the trouble of fixing the rent by this method, but more frequently judge by comparing it with the adjoining land, or by the common rate of the neighbourhood. For this purpose, a valuer should be a person of clear understanding, liberal education, and of the strictest integrity; capable, from general practice, of examining thoroughly,

and of calculating correctly, the expenses and profits of all the different operations performed upon land. The state of the markets, the rise and fall in the price of each article of produce, must constantly engage his attention; and, in making valuations in conjunction with another, he must be able to support his opinions clearly and forcibly, and be ready in detecting and refuting any incorrect insinuations advanced by his opponent.

One way of calculating the rent of land, is to value the gross produce of the farm in one year for the farmer's benefit, in corn, hay, grass, turnips, and every thing it is capable of producing. The sum is divided into three parts: one third is allowed for the general expenses of farming, another, for the maintenance of the farmer's household and profit on capital, and the remaining part is reserved for rent, including taxes, tithes, and assessments. This is a ready way of ascertaining rent, and may in some instances

approach very near the truth; but localities differ so much that, in many cases, especially where grass lands prevail, it would lead to very erroneous results. It has been often observed, that the difference made in the rent of rich light soils and of clays is seldom in the full proportion of their relative value; for, if the expenses and profits of each were fairly calculated, it will be found that the former will bear nearly twice as much rent as the latter; and, when land varies much in quality, the difference is still greater.

The above mode was generally used in apportioning rents previous to the introduction of improved cultivation, in better implements, clovers and turnips. In those times labour was more tedious, and there was much less disposable produce; rents were also paid partly in money, and partly in service and in kind; but, as the circulating medium became more plentiful, these payments were gradually abolished, and

money rents now almost universally prevail. The surplus produce of farms, after deducting the expenses of cultivation, is the proper subject on which to calculate rent. A portion of this surplus is due to the farmer, as a remuneration for the use of his capital employed, and for his personal attention, and the remainder shows the rent due to the landlord, taxes included. In making such calculations, we are led into many intricate and difficult statements, the items of which are numerous and ever varying. The profits of rearing and feeding stock are not so regular as the production of corn; and it is customary to avoid computing the profits of stock in ascertaining the rent, and to value the land on which they are fed, comparing the quality of the soil with that of the fields under a regular course of cultivation. Dairy farms, that are nearly or wholly in grass, are valued by the number of stock they will keep, and by the profits of local situation; but in our modern mixed husbandry, where arable and grass lands are converted at alternate intervals, the readiest way of computing rents is to ascertain the value of a portion of the best and worst land, and to judge of the intermediate qualities by comparison. This plan was laid down by Dr. Coventry, late Professor of Agriculture at Edinburgh, who formed a table for regulating rents yearly, or for an average of years, according to the value of the gross produce on an acre of different qualities of soils. Thus, on land capable of producing

Per acre. £10 10 0, one third, or £3 10 0 for rent.

6 12 0, one fourth, or 1 13 0 4 5 0, one fifth, or 0 17 0

This table was constructed for land in Scotland, where expenses are rather lower than in this country, and at a time when produce sold at a much higher value than at the present time. It need scarcely be remarked that, as produce falls in value, less rent can be afforded, as the expenses of cultivation and of tradesmen's work seldom fall in an equal proportion with the reduced value of corn and other produce.

The expense incurred in cultivating good and bad land is nearly the same: clay lands require more strength in ploughing, and, in some cases, good lands will require some extra expense in preparing for a particular crop. A trifling difference will take place in tithe and assessments. The above table seems to have been formed on the supposition that bad land requires much less cultivation than good; for, if we regulate the rent by the comparative value of produce, and try the table by this standard, we will find it inapplicable. For the difference in the value of produce is greater than the rent; and accordingly, in order to leave any rent, the expenses of cultivation must have been calculated to fall in proportion to the quality of the soil, which certainly does not happen. A soil worth 20s. or 30s. per acre will require as much cultivation as that worth 40s., though, in many instances, a good turnip soil will require more expense than a weak clay fallow; and ceratinly, in many instances, inferior lands require less cultivation, but by no means to be calculated in a direct ratio to quality. The sum of 33s. is too much rent for an acre of land producing 6l. 12s.; and land not yielding more than 4l. 5s. is worth little or no rent, unless joined, as it generally is, or ought to be, with a greater portion of better land constituting the farm.

The mode of ascertaining rent here adopted, is, to select one acre of the best arable land, and to value the labour, expenses, and produce, through a four years' course of husbandry, of turnips, barley, clover, and wheat; and, after taking an average of the profit, to deduct 10 per cent. for interest on the capital afloat, and the remainder is the rent. The same plan may be adopted in the case of clays; and, when

a value is thus formed of the best and worst land on the farm, the intermediate qualities of the other fields may be readily valued by any person who understands the valuing of land. The sum of 10 per cent. on the capital expended on perishable stock is much too low a rate of interest for such risks; and 15 and even 20 per cent. have been mentioned as not more than equal to the attention the business requires, and to the tear and wear and casualties of the concern. Some writers allow 10 per cent. for interest on capital only, and leave the farmer to find a remuneration for his time and attention from his exertions in business. expenses and maintenance of the family are also allowed to arise from his and their industry, which would amount to 10 per cent. more. From strict inquiry and due examination, it would appear that the farmer is justly entitled to 20 per cent .: to 5 per cent., which interest he could obtain from his money, and leave his personal attention unoccupied; to 5 per cent. for casualties, and deterioration of property in the shape of perishable stock, and to 10 percent, for his time and exertions in the occupation. Thus, if a farmer expend 1500l. on a farm of 250 acres, he will require 75l. for common interest, and 75l. for casualties, and 150l. for himself and family, a sum he and others may expect from devoting their undivided time and attention to any other business. On small farms, the tenants do a great part of the work themselves, and on extensive farms, their fullest attention will be required in directing and superintending. On the subject of the per centage due from capital employed, very different opinions have been entertained; but it seems a fair and just conclusion to allow the farmer such profits as are derived from other professions, and 10 per cent, is sufficiently moderate. Five per cent. for casualties is also low enough, and the other 5 per cent. may be disputed, as it may be urged that the farmer could not engage in any other business without his capital. But if he be possessed of such a sum of money as would at 5 per cent. afford him a livelihood, he is fairly entitled to that interest from the business to which he applies it, along with an additional per-centage for his time and attention. The lowest calculation cannot be under 15 per cent., though my own opinion would allow him 20; viz. 15 for profits on capital and time, and 5 for casualties.

In order to explain the manner of ascertaining rents and tillages, it is intended to value the farm in the first place for the rent, and afterwards for the tillages that would be allowed according to the custom of the country where the farm was situated. We certainly cannot show the rent that will be equitable at all times; but must endeavour to judge as nearly as possible from past experience, and from the probable averages of future prices. This necessarily leads to the consideration of the fluctuating

price of corn and other produce, and to the average cost of labour and other expenses, for the last eight or ten years, according to the most approved rules of husbandry, which will show in some measure what labour will be required in future. The season will make a difference in the quantity of labour required in different years; and the farmer is not obliged nor expected to adhere precisely to the same methods of tillage, but is left to use his discretion, and to work the land in the way he may think most proper and advantageous. Such considerations would seem to render it impossible to arrive at correct and definite conclusions; but a near approximation from averages is all that can be expected in such cases, leaving alterations to be made as time and circumstances may render necessary.

The plan of the farm laid down at the beginning of this book, represents a plot of land in the West Riding of Yorkshire, and consists of sixteen fields, containing fifteen acres each, besides the homestead, which measures exactly two acres.

That part of the plan coloured with pink is a dry turnip soil, on a gravelly subsoil, and is well adapted to the growth of turnips, barley, clover, and wheat. The other part is a strong stiffish loam, on a retentive clayey subsoil; which, although not calculated for growing turnips with success, is capable of producing by good management heavy crops of wheat, beans, and oats, and occasionally clover and barley might be introduced for a change.

The light land graduates into the strong in a regular manner, as shown upon the plan by the light shade round the colour. Across the middle of the fields Nos. 9. 12. and 13., the soil is remarkably stiff and stubborn; and, in consequence of their lying nearly on a level with the adjoining brook, are often overflowed with water. The quality of the soil in Nos. 10. and 11. may be taken as a medium betwixt those

just mentioned and Nos. 14. and 15. Nos. 1. 14. and 15. are excellent strong soil, and often grow heavier crops of wheat than any of the light land.

The course of the canal, and the boundaries of the farm, may be relied on as correct, having been taken by actual inspection and admeasurement. This is not exactly the case with the fences and homestead. To render the plan more complete, the fences have been straightened a little with the ruler; and the homestead has been entirely removed from a village adjoining the northern boundary. This arrangement makes the farm more compact, and increases the value of the land immediately round the buildings.

V.

ON THE VALUE OF LABOUR.

The value of labour is in a great degree regulated by the price of corn; though the latter has experienced greater fluctuations and more sudden advances and falls than the former. Yet the price of labour follows, and at present bears nearly the same proportion to the price of corn it did several centuries ago: the profits obtained by the improvements in agriculture, will balance the additional charges and expenses for the poor and other rates. Upon this principle, it is assumed as a foundation in the following calculations, that the daily wages of a labouring man are equal to the price of a peck of wheat, which has been reckoned a fair proportion from time immemorial. In our oldest agricultural records, we are told that that quantity has been found to be an adequate remuneration for the daily labour of an able-bodied man; and even now the comparison holds good in an average of years. Wheat is reckoned the general standard to be observed, being the staple article of produce in our country, and other produce generally falls and rises on any alteration in the price of wheat. This may not always happen, but comes about leisurely and certainly on any material change; as wheat is an article of the first necessity, and commands the market at any time, regulated by the supply and demand.

During the last seven years the average price of wheat in England has been about 6s. 6d. per bushel, and this will be taken as a scale from which to ascertain the rent, and to which it is intended the value of every operation shall bear a relative proportion. Hence, when wheat sells at 6s. 6d. and 7s. per bushel, the wages of a labourer will be about 2s. a day; and if wheat sells at 8s. and 9s., the wages will be 2s. 3d. and 2s. 6d.,

and so on in proportion. This is not always the case; but in assuming a general average for the purpose of forming calculations, it will perhaps arrive as near the truth as any method yet discovered.

In estimating a fair charge for the labour of farming horses a day, various items must enter into account; and it is here supposed that they are kept on hay, beans, and oats, during winter, and during summer on green food, cut and given them in the house or in the yards. A healthy horse constantly at work, will eat 15 stone of hay in 24 hours, along with a peck of mixed oats and beans; the same animal will eat nearly three times the weight of clover or grass in a green state, that he will eat when it is dried; but no certainty can be advanced, as very much will depend, if the green food be in a young or in an advanced state. Natural grasses and clovers are found to lose three fourths of their weight in the process of drying or in being made into hay. Formerly, horses were employed only in the spring, summer, and autumn; and in these seasons they were probably not engaged above three days in the week, besides remaining almost totally idle during winter. But since the introduction of the new systems of cultivation and of road-making, their strength is almost constantly required, and their work is much more regular. When weather permits, little respite is now allowed them; and on an average we may reckon a horse to work 300 days in the year, deducting 52 Sundays, and allowing the odd 13 days for the contingencies of sickness and of weather.

When wheat sells at 7s. per bushel, oats may be stated at 2s. 6d., and beans at 4s., and hay at 4l. a ton. The relative proportions of the prices of grain, according to the regulation for importation, are, barley at half the price of wheat per quarter, and oats at one third less than barley. Therefore if wheat be 7s. per bushel, barley will be 3s. 6d. and oats 2s. 6d. But 7s. is rather too high

an average for the last seven years; a fairer average would be 6s.6d. for wheat, 3s.6d. for barley, 2s.6d. for oats, and 4s. for beans and peas.

In the following estimate the horse is supposed to have corn at the rate of one peck a day, or two bushels a week, for eight months of the year; and when eating green food during the four summer months, at the rate of 11 bushel of oats a week. On many farms, and especially where green crops are grown on a large scale, the full allowance is continued through the whole year, and three bushels of oats and beans are often allowed to each horse during the busiest seasons. A horse will require hav for about five or six months of the year; and consuming 21 lbs. a day, will eat during that time two tons of hay; and eating green food at the rate of about 112 lbs. a day for 140 days, seven tons will be the supply required. The best of the straw, the bean and pea haulm, may be reckoned to fill up two months of the year. Much alteration may be effected in the above estimate by feeding with cut and cooked food: the cost may probably in some cases be reduced; but hay, corn, and green food are here used, as these articles yet form the most common food, and of which the value can be most satisfactorily ascertained.

A farm of 242 acres will require nine horses and the necessary implements of husbandry to work the arable land. More capital than is here calculated will be required for the occupation of a farm of this extent, and is sometimes charged yearly on the profits of the farm from the produce derived from it.

		£	s.	d.
-	-	270	0	0
h -	-	36	0	0
-	-	50	0	0
-	-	60	0	0
5l	-	20	0	0
-	-	15	0	0
-	-	5	0	0
-	-	2	0	0
	- 51, -	 51,	270 th 36 50 60 51, 20 - 15	270 0 ch 36 0 50 0 60 0 51 20 0 15 0 - 5 0

Carry forward 458 0 0

Different results will be obtained in these estimates by using other implements of

37 10 0

300 days, at 2s. 6d.

husbandry, and from various other articles being used as food for horses. An average is here attempted to be shown, and the charges and quantities are stated, in order to allow room for careful and industrious management to reduce the items, and gain something by substitution. Ten per cent. is charged for tear and wear, besides tradesmen's bills; and the horses, carts, and other implements are supposed to last 10 or 15 vears, some of which may fall short of, and others may exceed, that time. pounds a year, or 12s. a week, is generally accepted as the medium cost of a horse's yearly keep, bringing the keep of a team or of one plough to about 100l. Thus:-

Keep of two hors	es -	-	-	60	0	0
Blacksmith's bill	50s., joine	r's 50s.,	sad-			
dler's 20s	-		-	6	0	0
Ten per cent, on	601., prime	e cost of	f two			
horses -	-	-	-	6	0	0
				_	_	_
				72	0	0
Ploughman's wag	es, 12s. a	week	-	32	0	0
						_
				104	0	0
						-

By the former estimate, the capital required for one plough amounts to about the same sum.

	£	s.	d.
If 12s. a week be received as the average weekly cost of keeping a horse, the daily			
cost will be 1s. 8½d.; and of two horses -	0	3	5
Man's wages	0	-2	0
	0	5	5
Ten per cent. on 90l., viz. 60l. prime cost of horses, and 30l. the price of carts and			
harness	0	0	7
			_
	0	6	0
Ten per cent. more on money daily em-			
ployed	0	0	6
	_	_	_
	0	6	6
	_	_	_

From which it would appear that what is got above 6s.6d. or 7s. a day for a man and two horses goes to the owner for profit. Ten per cent. on 90l. will replace the horses and implements in 10 years, the time that carts and horses in constant employment may be presumed to last; and 10 per

cent. more is allowed for interest on capital that might be otherwise employed. A something will be gained by the interim use of the 9*l*. when not required by any expensive contingency.

By the foregoing calculations, it is shown that, when wheat sells at an average of 6s.6d. a bushel, the average value of the daily labour of a horse engaged in husbandry may be stated at 2s.6d., including charges for the decline in the value of the horses and of carriages and other farming implements. By classing these different items together, it is hoped that the calculations introduced in the following part of this work, will be rendered clearer and more simple than if entered singly under their respective heads.

Some farmers are in the habit of attempting to reduce expenses by working much with boys at less wages than men, and with young horses; but it may be suspected that if carried too far, as is very often the case, the produce may be correspondingly reduced; for boys and young horses are very useful in assisting, but they cannot work a farm. A small saving may be effected by such arrangements. On moderately sized farms, lads may be mixed among men, and the inferiority may not be much felt, and is every day mending, and both they and young horses must be brought forward somewhere; the evil to be guarded against is, that it be so arranged as not to bear on the cultivation of the farm, and consequently on its produce, and on the advancement of the work at the proper season.

VI.

EXPENSE OF CULTIVATING TURNIP SOILS FOR FOUR YEARS; PRODUCE AND RENT.

Courses of crops vary much, according to the quality of the land, climate, and situation. In populous districts and in the vicinity of towns, potatoes, carrots, and other esculents are much cultivated, and grown alternately with corn, except where clover and grasses are introduced for a change. In remote situations, and on inferior soils, rotations of 5, 6, and more years are very much followed. On our best loams for green crops, the four years' shift is much used, --viz. turnips, barley, clover, wheat, and sometimes, on stiffer soils, beans are grown in the place of clover. In cases where clovers fail, other crops are substituted; the red clovers are used once in 10 or 12 years, beans, tares, and white clovers taking its place. But if land be well cultivated, such failures will seldom occur; though, in the four years' course, the great fault is, that the crops recur at too short intervals, and are consequently deficient in variation. Each rotation has its peculiar advantages, according to soil, situation, and management; that of four years is here detailed to show the expenses of cultivation.

The land intended for turnips is supposed to be a wheat or oat stubble after carrying the four crops since last fallowing, and which have left it in fair condition as to cleanness and friability.

The first ploughing is given at any time during the months of November, December, and January, and the fence sides and ditches, if any, are grubbed and cleaned out during the winter. This is part of the work of the field; and if regularly performed during every fallowing, the fences and ditches will be always in good order. In dry situations, it will not be wanted; but on wet lands it deserves much attention. A diversity of opinion prevails among farmers as to the depth of the winter furrow. The depth of the soil must in all cases regulate the depth of ploughing, and when land is ploughed at any season of the year, a good hold of it may be safely recommended. A deep winter furrow exposes much soil to the action of atmospheric changes, and a greater depth of soil and a better pulverisation are consequently obtained. On the other hand, it is thought that very deep ploughing buries the weeds too much, and causes additional labour in getting them out. By shallow ploughing, the under soil is left untouched, and if ploughed up in the spring, will require more strength at that time than in winter. On lands that will admit of that depth, a furrow of not less than eight inches may be mentioned as an average; and in cross ploughing in the spring, the same depth will be easily obtained with the same power, because the land has been previously stirred. On all clays and stiff loams, a power of three horses may be very beneficially used in giving the winter furrow, and the land thus once well stirred will require less power afterwards, and will afford a depth of tilth essentially necessary for the safety of green crops. Farmers object to a depth of soil covering couch and weeds; but the eradication of weeds is only one object of fallowing—we must have the soil well stirred and wrought; and land thus treated will be found in a much superior state during the subsequent workings compared with the same depth of soil turned up in the spring.

In the spring, so soon as the weather permits, the second ploughing is given, usually straight across the winter ploughing. A man with a pair of good horses will plough in the spring one acre in a day; and three roods in winter, as more strength is required and the days are shorter.

If the weather be tolerably fine, an ex-

posure of a few days will render the land fit for working by harrow and roll, and may be continued till no more effect can be produced. Four or more tines of harrowing may be required before rolling, and two or more after that operation, in order to disengage the weeds, which are then carefully picked off. If the soil lie very rough after cross ploughing, the drag harrow may be required to go first; but this weight of harrow is seldom required on turnip soils, our modern heavy rolls performing the work more quickly and much more effectually. A pair of harrows will double tine five acres a day, and a drag harrow from four to five acres a day twice over. Rolls that will produce an effect to justify the time expended by man and horses, should be about a ton in weight, and not under 15 cwt., and 6 feet in length; and the first application may require three or four horses, and will go over about 10 acres in a day. Harrowing follows, and is continued till the clods get very hard, and of a size to pass between the teeth of the harrows, and then no more good can be effected. The roll may again follow, and harrowing afterwards; and the weeds being gathered and carted off, the land is ready for another ploughing.

The third and fourth ploughings are performed in the same way, and are followed by as many ploughings and harrowings as may be found necessary to reduce the land to a state sufficiently clean and fine for the reception of the dung and the turnip-seed: three workings, including the winter furrow. and at most four, are usually sufficient. About 12 cart loads of three horses, or 20 one-horse cart loads an acre, are generally reckoned an average dressing of manure prepared for turnips, and which is supposed to be lying in a corner of the field, or in some convenient place adjoining. It is usually produced on the farm, and carted out at convenience during winter.

It is impossible to fix a value for carrying

and spreading turnip dung in every situation; but if the field lies near the homestead, it may in some degree be ascertained by the value of the labour required. A man will fill 16 cart loads of three horses. or about 30 one-horse cart loads of dung in a day, which being hard work, we must allow him 2s. a day. Four men filling 12 or 20 loads a day would require four carts and four horses, with three boys to drive, and one man to drag it from the cart on the land. In the following calculation, 12 large loads, or 20 small ones, and the average expense of each operation are stated. leaving the farmer to employ the power he may find most convenient and the cheapest in the locality.

			£	8.	d.	
Four men filling, at 2s	-	-	0	8	0	
One man dragging out, 2s.; and t	hree boy	s				
driving, at 10d. each -	-	-	0	4	6	
Four carts and horses, at 2s. 6d. e	ach	-	0	ΙÓ	0	
				_	_	

Carried forward 1 2 6

TURNIP SOILS FOR FOUR YEAR	ıs.		11
	£	8.	d.
Brought up	1	2	6
The manure will have settled one third since			
it was thrown up, and we may allow one			
third more than 11.2s. 6d. for winter car-			
riage	1	10	0
A man two days turning the heap	0	4	0
Three men spreading, at 2s	0	6	0
	-	_	_
	3	2	6
64 loads, at 1s. per load	3	4	0

It may be inferred from this estimate, that when labourers' wages are at 2s., 1s. a load may be considered a customary price for carrying and spreading dung produced in the farmyard. More or less expense will be incurred by the manure being prepared in the home yards, and according to the distance of situation; but unless the field be immediately adjoining the homestead, the dung is almost universally carted to a heap in the field, and there prepared previously to being used. Wages differ considerably. The following estimate may show an average of the modern drill system:—

	£	s.	d.
Four men filling 120 small cart loads, at 2s.			
a day	0	8	0
One man dragging out, 2s.; three boys, at			
8d	0	4	0
Four carts and horses, at 2s. 6d	0	10	0
	_		
	1	2	0
	1	9	4
One man two days turning heap	0	4	0
Four women spreading at 1s., 4s.; and one			
man superintending, 2s.	0	6	0
	_		_
	3	1	4
120 small loads, at 6d	3	0	0

This estimate supposes a man on the dung-heap to fill manure for $1\frac{1}{2}$ acre of land, one cart to carry it out, and a woman to spread it, with $\frac{1}{2}$ th of the man's assistance, which, and more, may be easily performed by proper arrangement. In all such estimates, the expenses should be stated at a high rather than a low rate, that the farmer may have a chance to keep the expenses

below the scale here laid down, and to provide for unforeseen accidents, against which it is impossible to guard: the first estimate will be used in the valuations.

After the land intended to be sown with turnips in the broadcast method has been brought to the proper tilth, the dung is spread on the surface and covered with one ploughing; the seed is then sown at the rate of two or three pounds an acre, and covered by bush-harrowing and rolling, or both. A man can easily sow 10 acres for a full day's work; but, except on large farms, it is seldom necessary to sow that quantity, and therefore 6 acres may be taken as a daily average of sowing: a lad with a pair of light harrows will go over 12 acres a day. Drilling of turnips is not practised, on account, as is very generally urged, of the additional expense incurred. One plough will go over an acre a day in the broadcast method, and light harrows and rolling follow: a double mould-board plough will open drills at the rate of 5 acres a day, and cover the dung at the same rate, or with two furrows at the rate of $2\frac{1}{3}$ acres in a day; and a double-drill turnip sower, with a man and a horse, will easily sow 10 or 12 acres a day.

				£	s.	d.
Ploughing for broadcast	five root	ls a day	-	0	8	0
Harrowing, sowing, and	rolling	-	-	0	1	6
				0	9	6
One drilling, 5 acres a d	ay	_	-	0	2	0
Do. 2½ acres a day	-	-	-	0	4	0
Sowing and rolling	-		-	0	1	0
				0	7	0

On light soils the dung is covered at the rate of 5 acres a day; and in either way the expense of drilling is less than by broadcast, reckoning the seeding and manuring alike in both cases. The aversion to drilling arises principally from the difficulty of getting it well performed, which, if not done, it will frequently prove less beneficial than by the broadcast method; the advantages are, greater regularity in placing the plants over the dung, and an incomparable superiority in cleaning and pulverising the land.

The labour of the turnip crop will be completed by hoeing them twice over; the first time when the plants are in rough leaf, and the second, about two or three weeks after. The plants are left about eight or ten inches distant from each other, and the intervals are well worked over. One acre of first hoeing is usually reckoned a day's work for three men; but two expert hoers should perform that quantity. The second hoeing is generally thought worth half the labour and cost of the first; but this later hoeing will much depend on the season, the state of the land, and also on the manner in which the first hoeing has been performed. An abundant crop of turnips is so very desirable, that too much pains cannot be taken in hoeing and keeping down the weeds, so as to give the crop a fair chance after the previous heavy expenses have been incurred, for upon this crop mainly depends the success of the subsequent crops of the rotation. In foul lands, and in very wet seasons, a third hoeing may be necessary: earthing up by a double mould-board plough is now seldom practised, unless on wetbottomed lands to facilitate the escape of water during winter.

The turnips are cleared off during winter either by being eaten partly or wholly on the ground by sheep, or by being drawn the yards to be consumed by cattle. In March or April, according to season, the land is ploughed for barley with one furrow, at the common rate of from one acre to five roods a day, and the seed is immediately deposited broadcast or by drill. Four bushely deposited broadcast or by drill. Four bushely deposited broadcast or by trill. Four bushely deposited broadcast or by trill. Little difference in point of expense exists between the two

methods; three or four tines of harrowing are generally sufficient to cover the seed; and in drilling, a rolling must precede and follow it. The roll follows, which, with the tines of harrowing, may be done at the rate of 10 acres a day. Barley sown thin is apt to grow long and coarse in the straw, and is not so good for stock, and the sample is not so plump and bright as when moderately thick on the ground.

As soon as convenient after the land has been rolled, the grass seeds are sown, usually at the rate of 12 lbs. of clover to an acre; now, in many cases, mixed with a bushel of ray grass, where the crop is intended for hay; if for seed, a part may be sown unmixed. Our modern sowing machines, with a horse, man, and boy, will sow 30 acres a day; the grass seed harrows follow, with a double or single tine, and then water furrowing if necessary. Large weeds are cut out or pulled by hand in May or June, and may cost about 1s

an acre, more or less. Barley crops are cut by mowing at 2s. 6d. per acre, and by reaping at about 7s. The expense of carrying and stacking depends on the distance of carriage; suppose half a mile, seven horses, four men, and two boys will carry eight or ten acres a day. If we take 10 acres, the expense may be stated as follows:—

					æ	s.	d.
Three waggons	will	require	seven hor	ses,			
at 4s	-	-	-	-	1	8	0
Four men, at 4s.	-	-	-	-	0	16	0
Two boys, at 1s.	6d.	-	-	-	0	3	0
Thatching and o	ther	trouble	-	-	0	5	0
					9	12	0
					2	12	U
Ten acres, at 5s.	3d.	-	-	-	2	12	6

Barley is threshed by flail for about 2s. a quarter; and may be threshed by machinery impelled by horse power for 1s., and by wind, water, or steam, for 5d. In most cases barley is reckoned worth 2s. 6d. per quarter for threshing and winnowing by hand labour; and as machines have not yet come into general use, notwithstanding the great and acknowledged superiority, the average of 2s. per quarter will be taken. The expense of selling and delivering must vary according to distance; for which, if supposed to be one day's work, 1s. per quarter may be allowed.

The next labour required is securing the clover crop, which is generally out the first time in June or July, and the second time in September. In the case of a moderately strong crop, the mowing and making into hay will be worth 8s. an acre, and the second crop, about 2s. less. The carrying and stacking at moderate distances may be averaged at 8s. an acre for the first crop, and 6s. for the second. Notice has been sometimes taken of the pasturage after the second cutting; but as it is generally ploughed in with the seed furrow, the value need not be stated.

In ploughing clover ley for wheat, one acre is found a good day's work for a man

and two horses, which will require three bushels of seeds. Sowing 10 acres a day by drill or by broadcast is reckoned a sufficient day's work; and as it is yet doubtful what advantages, if any, arise from drilling except in a few particular situations, the advantages that may be occasionally derived may be allowed for any extra labour incurred. Clover ley will require four or five double tines of harrowing, and probably one rolling, and also water furrowing; and large weeds, if any, must be cut or pulled out. Nothing further is required till harvest, when the expense of reaping may be stated at 10s. an acre, carrying and stacking 5s. 6d., threshing 12s., and marketing 6s. Machinery will reduce the expense of threshing to one half, and if by inanimate power, to one fifth.

Having pointed out the labour required during the four years' course of husbandry, we now proceed with the necessary calculations of the expenses of each crop:—

Turnins __ First Vear

1 11111	ups-	-1.11	st Leur				
					Per	acı	e.
					£	s.	ď.
First ploughing at	Christ	mas, a	t the rat	e of			
3 roods a day		-	- '	-	0	10	0
Grubbing and clear	ing di	tches	-	-	0	0	6
Second ploughing in	n the	spring	, at one a	cre			
per day -		-	-	-	0	8	0
Four times of harro	wing	-	-	-	0	4	0
Rolling once -		-	-	-	0	1	0
Four times of harro	wing	-	-	-	0	4	0
Gathering and burn	ning co	ouch	-	-	0	1	6
Third ploughing -		-	-	-	0	7	0
Three harrowings		-	-	-	0	3	0
Rolling		-	-	-	0	1	0
Two harrowings -		-	-	-	0	2	0
Couching -		-	-	-	0	1	0
Fourth ploughing		-	-		0	7	0
Harrowing and roll	ing	-	-	-	0	3	0
Couching, &c. last t	time	-	-	-	0	1	0
Sowing by drill o	r by	broad	cast, at	an			
average -		-		-	0	7	6
				5)3	1	6
Avera	ge of	one dr	essing		0	12	3

	2	٥.	4	
Five dressings (brought over)	3	1	6	
Manure, including carrying and spreading	5	0	0	
Seed, three pounds	0	3	0	
Hoeing twice	0	8	0	
Allowing the land to be limed once in three				
or four returns of the rotation, and the				
cost to be 4L charge here	1	0	0	
	_			
	20	19	6	

The fourth dressing is in many cases not required, which will diminish the expense by 10s. or 12s.; and the lime is sometimes not applied, but in that case more dung should be used.

Barley - Second Year.

		£	8.	d.
One ploughing	-	0	7	0
Three times of harrowing 3s., rolling 1s.	-	0	4	0
Seed, four bushels, 14s.; sowing 6d.	-	0	14.	6
Furrowing and weeding	-	0	3	0
Reaping 6s.; carrying and stacking 6s.	-	0	12	0
Threshing five quarters, at 2s	-	0	10	0
Winnowing and marketing -	-	0	10	0

^{£3 0 6}

TURNIP SOILS FOR FOUR YEARS. Clover __ Third Year. Twelve pounds of clover seeds, at 6s. - 0 6 0 . . Bushel of ray grass Sowing, harrowing, and rolling -Mowing and making two crops -Carrying and stacking - 0 12 £1 19 0 Wheat ... Fourth Year. One ploughing Four times of harrowing - -- 0 4 Seed, three bushels, at 6s. 6d. - 0 19 6 Sowing and weeding, furrowing, grooping, and rolling - -Reaping 10s., stacking and thatching 6s. - 0 16 0 Threshing thirty-two bushels, at 5d. - 0 13 6 Winnowing and marketing -£3 14 0

Expenses of the Four Crops.

			-			æ	s.	d.	
Turnips	-	-	-		-	9	12	6	
Barley	-	-	-	-	-	3	0	6	
						_		_	
			Ca	rry forw	ard	12	13	0	

						£		d.
			Brong	ht forwar	а	£	s. 13	a. 0
Clover	_	_	Droug	at tot wat	u -	1	19	0
Wheat	-	-	-		•	3		0
W Heat	-	-	-	-	-		1.1	_
					1 2	18	6	0
						4	11	6
Tithe 1	ls., taxe	s 6s.	-		-	0	17	0
	,					_		_
						5	8	6
Add ten	per cer	at. on 5	l. 12s.	-	-	0	11	0
						5	19	6
Add far	mer's p	rofit pe	r acre, o	r about	ten			
per c	ent. mor	e -		-	-	0	12	0
						_		_
		A	verage ex	cpense	-	£6	11	6
	_	_		~		_		_
	Proc	duce o	f the Fc	nır Cro	ps.			
m'						£	8.	d.
Turnips			. 00.	-	-	4	0	0
Barley,		irters, a	tt 288.	-	-		0	0
Barley		-				2	0	0
			and a half		ws.		10	0
			ne ton, at	40s.	-	2	0	0
Wheat,						10	8	0
Wheat:	straw, o	ne and	a half to	n, at 36s	-	2	14	.0
								_
					4)	32	12	0
	Avera	ige pro	duce			-8	3	0
	Avers	ige exp	ense		-	6	11	6
		- 1				_		_
	Remai	ins for	rent	-	-	£1	11	6

The tithe is shown to be 11s. per acre, and is found by dividing by ten, the average value of the produce, not including the hay and turnip crops. If the land be tithefree, the charge would of course be added to the rent.

Thus it appears that when the price of wheat averages about 6s. 6d. per bushel, and when other profits and expenses are in proportion, the rent of good turnip land, such as is coloured pink in the plan of a farm annexed, may be stated at 1l. 11s, per acre. If the price of wheat averaged below 6s. per bushel, the rent would be reduced by one sixth. The current price of grain is the general standard used in computing the profits arising from land; and wheat being a staple article of produce in most districts, a scale may be formed by which the rent of land, after being once fixed by a certain price of grain, may be raised or lowered, according to the current price of wheat, or any other article or articles

that may constitute the chief items of produce, and which enter most largely into the computations of the farmer in looking for rent and profits. This may be done by having each field valued according to its relative worth; the whole is then added together, and an average taken of the whole farm, from which a table may be formed in the following manner:—

pe	el. p	per acre	
If wheat sells at 4s.		the rent may be	15s.
	5s.	_	20s.
_	6s.		25s.
	78.		30s.
	8s.		35s.
	0.		40.

And so on, increasing or diminishing 5s. an acre for every variation of 1s. in the price of a bushel of wheat, providing a corresponding alteration takes place in the price of labour and of other articles. This very seldom happens; for the cost of labour and of tradesmen's work is much more stable than the prices of farm produce, and

cannot possibly rise and fall monthly and weekly. It will be perceived that this scale applies to land of very good quality: on soils not producing above twenty bushels of wheat per acre 2s. 6d., or at the utmost 3s. per acre, will be a sufficient alteration in the rent for every 1s. of variation in the price of a bushel of wheat.

Such scales may be constructed to suit almost any locality; cheese and wool may form the averages in some places, and oats and the yearly cast of stock in others. A scale on the following principle was long used, and I believe is yet followed, on an extensive clay land estate in one of the northern counties. The full rent was charged when wheat reached 12s. 6d. per bushel, and the fluctuations in the rent decreased by the averages of the market town taken every three months. It gave the farmers much satisfaction, and seemed to answer a good purpose.

Wheat per bushel.	Sum paid in lieu of 10 <i>l</i> .	Sum paid in lieu of 100 <i>l</i> .			
£ s. d.	£ s. d.	£ s. d.			
0 4 0	6 12 0	66 0 0			
0 4 6	6 16 0	68 0 0			
0 5 0	7 0 0	70 0 0			
0 5 6	7 4 0	72 0 0			
0 6 0	7 8 0	74 0 0			
0 6 6	7 12 0	76 0 0			
0 7 0	7 16 0	78 0 0			
0 7 6	8 0 0	80 0 0			
0 8 0	8 4 0	82 0 0			
0 8 6	8 8 0	84 0 0			
0 9 0	8 12 0	86 0 0			
0 9 6	8 16 0	88 0 0			
0 10 0	9 0 0	90 0 0			
0 10 6	9 4 0	92 0 0			
0 11 0	9 8 0	94 0 0			
0 11 6	9 12 0	96 0 0			
0 12 0	9 16 0	98 0 0			
0 12 6	10 0 0	100 0 0			

The circumstances that gave occasion for the use of this scale have now passed away, prices of grain are more steady, and most farms have been relet on a surer foundation; but in many places grain rents yet prevail, convertible by the average price, and have a maximum price fixed beyond which the rent shall not rise, and a minimum below which it shall not fall, in order to guard against the extremes of both cases. In other instances, a part only of the rent is payable in grain, regulated by the average price; which arrangement leaves a part of the rent fixed, and both parties bear a share of the gain or loss arising from the fluctuations in the other part.

The following scale is constructed on the principle of the foregoing, taking 7s. as the average price of wheat, when the rent is charged in full, which average is calculated from the returns of the Board of Trade, as under; and reckoning the year 1839 as one, at the high average of 70s.

			S.	a.	
Average in	1830 -	-	62		quarter.
	1831 -	-	67		_
	1832 -	-	60	8	_
_	1833 -		53	6	_
	1834 -		48		
_	1835 -		40		_
	1836 -	-	43	11	-
_	1837 -		56		_
_	1838 -		59		
	1839 -	-	70	0	- ,
			_		
	year	s 10)	563	0	
			_		
		8)56	0 per	quarter.
			_		
			7	O ner	bush now 6s 6d

The low averages of the three years, 1834, 1835, and 1836, have much depressed the general average; had they stood at 60s., an average of 8s. per bushel would have been the result. But as low averages may soon return, 7s. per bushel is here used.

Wheat per bushel.	Sum paid in lieu of 10%.	Sum paid in lieu of 100l.			
£ s. d. 0 4 0 0 4 6 0 5 0 0 5 6 0 6 0 0 6 6 0 7 0 0 7 6	£ s. d. 7 12 0 8 0 0 8 8 0 8 16 0 9 4 0 9 12 0 10 0 0 10 8 0	£ s. d. 76 0 0 80 0 0 84 0 0 88 0 0 92 0 0 96 0 0 100 0 0			
0 7 6 0 8 0 0 8 6 0 9 0 0 9 6 0 10 0	10 8 0 10 16 0 11 4 0 11 12 0 12 0 0 12 8 0	104 0 0 108 0 0 112 0 0 116 0 0 120 0 0 124 0 0			

On a farm of 400 acres, suppose the rent is 500 λ a year, exclusive of taxes, and that 80 acres are yearly sown with wheat, and produce 320 quarters of grain, 280 of which may be sold: if prices rise 8s. per quarter, the farmer will gain 112 λ , or about 5s. per

acre: if it rises 3s. a bushel, he will gain 336L, or about 16s, an acre; and would be startled to find his rent nearly doubled by the average of wheat rising from 48s. to 72s. On a poor clay farm of the same size, producing 20 bushels an acre, about 200 quarters will be grown, 160 of which may be sold. If an advance of 8s. a quarter happen, the farmer will gain 64l., or about 3s. per acre; if the average rise 24s., he will gain 1921, and find his rent increased by two thirds. The first table is formed on the extreme case, and allows the full benefit of the rise or fall to the respective party; the latter follows a middle course, and gives a share only of the rise or fall to each party, and a chance of profiting something from the course of events. The sum of 81. for every 100% of rent is allowed for a fall of 1s. per bushel below 7s., which is 40l., allowed by the landlord to place against the 112l, the farmer had lost; and if a rise of 1s. take place, the farmer pays 40L out of the 112l. he has gained. And in the second place, on a rent of 300l. a year, the sum of 24l. is granted to set against the loss or gain of 64l. In the case of a rise or fall of 3s. a bushel, the sums of 120l. and 72l. are paid or withheld by either party towards the sums lost or gained. The variations in this scale may be thought too low; but after a rent has been fixed upon a fair average, a table may be constructed on the same principle to suit almost any locality, and may be useful for the purpose of adjusting rents according to existing circumstances, if the parties concerned be so inclined.

It has been proposed to fix the rent of lands at so many bushels per acre, according to quality; thus, reckoning 52s. the average price of wheat:—

					s.	d.	
Very poor land,	2	bushels			13	0	per acre.
Poor land -	3		-	-	19	6	_
Fair quality -	4		-	-	26	0	
Good quality -	5		-	-	32	6	
			-	-	39	0	
First quality -	7		-	-	45	6	_

If the rent be fixed by the yearly average of wheat, say 52s. for every two shillings per quarter which the average price falls below 52s., there is to be deducted 2s. per cent. from the rent, and for every two shillings the average rises above 52s. there is to be added 2s. per cent to the fixed rent, and so on. Such plans meet with many objections that almost defy removal.

In fixing the rents of poor and of fertile soils, the value of the produce of each must be borne in mind, as well as the quantity. The expenses of cultivating them do not vary much; but the value of the produce is often very different, which, together with the smaller quantity, constitutes the difference to be made in the rent.

VII.

EXPENSE OF CULTIVATING CLAY SOILS —

The rent of clay soils, such as those fields numbered 12. and 13. in the plan, must be ascertained by the same method as that of fine soils, in order that a comparison may be made whereby the value of the intermediate qualities may be fixed. This kind of land is supposed to be cropped in the common course of husbandry practised on strong soils; viz. first year fallow; second, wheat; third, clover or beans; fourth, oats; and sometimes fifth, beans, and sixth, wheat. The course of four years is taken as the most convenient for computation.

An opinion has been often advanced by theoretical writers, that summer fallowing may be abandoned, by adopting the cultivation of green crops in the drill system.

In all cases where land can be reduced in proper season to a tilth sufficiently fine to be planted with green crops, most certainly summer fallowing is wholly unnecessary; but we have soils in all parts of the kingdom which by any means of cultivation we possess cannot be reduced in due time, and in which green crops cannot be planted, and will not grow. Leguminous and herbaceous green crops have been recommended as a substitute. The use of them may prolong the return of the fallowing process; but the time of planting and of reaping afford no opportunity of applying the dung, or of working the land, and of pulverising it in a proper manner. Any attempts to dispense with fallowing on such soils have been attended with loss, and our best farmers will not delay the operation beyond the sixth year. Indeed most of them adhere to three crops and a fallow, as affording the surest means of obtaining a return for their labour in all seasons, of preserving

their farms in a regular rotation, and of distributing most equally the labour throughout the year. A deviation may be advantageously made in certain cases, but no calculation can be made upon it; for if any advantage be derived, and the land at the same time not deteriorated, it ought to be awarded to the farmer for any additional expenses incurred, and as a compensation for losses that may have been sustained by any similar speculations previously made. The roots and seeds of weeds must be carefully eradicated and destroyed; and on these soils, no plan of management has been yet devised so effectual for that purpose as a well-conducted summer fallow. These being carefully removed, and the land being well wrought and reduced by the plough, the harrow, and the roll, constitute the process of fallowing, by which the land is fited for the application of manure, and for the reception of the seeds of plants for a crop. Loamy soils, from their

composition and the dryness of the subsoil, admit of this purpose being effected in the spring, and in time for green crops to grow to perfection before winter; but it has been found that clays, from an entirely different composition, require the greater part of the summer for that purpose; and this difference marks the distinction of the kinds of soil, and consequently the distinction of the modes of cultivation. The one soil can be prepared at an early season for the seeds of that year's crop, the other cannot be prepared by any mode of cultivation yet known, but requires a much longer time; so that before it is got into condition, the season for planting any crop to be gathered that year, is gone. On superior lands of this description, a course of six years is followed. where, in the fifth year, beans can be planted, dunged, and drilled; but this process supposes a loamy quality, for on many soils beans cannot be drilled, or manure applied; and if the crop be sown broadcast, and not

hoed, it becomes a grain crop, and the course is severe. On the inferior soils of this description, a fifth year in grass has been successfully used, and oats or beans follow in broadcast. The modern system of close-draining may perhaps alter the present arrangements of cultivation; if it does not fit the clays for being cultivated with green crops, it may probably render them sufficiently dry and friable to be prepared properly, and in due season, for the leguminous crops which we possess as the most likely to take the place of a summer fallow, when it is found that that operation can be relinquished with safety. Such an alteration must suppose autumn and spring working of the land; and if draining remove the difficulty occasioned at present by the wetness of the subsoil, the objection caused by climate at these seasons still remains.

The following estimate is made on a stiff clay that cannot be cultivated with green crops, but which is capable of producing good crops of wheat, clover, and beans. The seasons have great influence on the profits of crops on such soils; an average can only be attempted, and should be so executed as to serve for a tenancy of moderate duration.

EXPENSES ON STRONG SOILS.

First Year __ Fallow.

Turst Tear-I autow.	
\pounds s. d	
First ploughing in winter with three horses,	
a man and a boy, at the rate of three roods	
aday 0 10 0	•
Grubbing fences and clearing ditches - 0 0 6	
Second ploughing in the spring 0 8 0	
Six times of harrowing 6s., rolling 1s.,	
couching Is 0 8 0	
Third ploughing 8s., four times of harrowing	
4s., rolling 1s 0 13 0	
Fourth ploughing with the manure - 0 8 0	
Seed-furrow 8s., three tines of harrowing	
3s., water-furrowing and grooping 1s 0 12 0	
Dressings 5)3 0 6	
Average of one dressing £0 12 0	

Second Year ... Wheat.

Manure
Chime applied every third or fourth fullow — charge here - 0 15 0
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
Weeding 0 1 0 Reaping 8s, carrying and stacking 6s 0 14 0 Threshing 24 bushels, at 5d 0 10 0
Reaping 8s., carrying and stacking 6s 0 14 0 Threshing 24 bushels, at 5d 0 10 0
Threshing 24 bushels, at 5d 0 10 0
zarcening at subicing we own
Selling and carrying to market 0 5 0
£7 5 0

Third Year __ Clover.

		£	s.	d.	
Twelve pounds of clover seed, at 6d.	-	0	6	0	
Bushel of ray grass	-	0	5	0	
Sowing and harrowing	-	0	1	0	
Mowing and making two crops, 7s. and	5s.	0	12	0	
Carrying and stacking	-	0	10	0	
		_		_	
		£1	14	0	

Fourth Year ... Oats.

		£	S.	ď
One ploughing on clover ley -	-	0	10	(
Seed five bushels, at 2s. 6d	-	0	12	6
Six tines of harrowing 6s., sowing	and			
grooping 1s	-	0	7	(
Rolling 1s., weeding 1s., reaping 6s.,	and			
stacking 5s	-	0	13	C
Threshing six quarters, at 1s. 6d	-	0	9	C
Selling and carrying to market -	-	0	5	C
		€2	16	6

Expenses of Four Years' Cultivation.

						£	s.	d.	
Fallow	-	-	-	-	-	3	0	0	
Wheat	-	-	-	-	-	7	5	0	
Clover	-	-	-	-	-	1	14	0	
Oats	-	-	-	-	-	. 2	16	6	
					1)	14	15	6	
						3	14	0	
Tithe 9s	., rate	3s.	-	-	-	0	12	0	
			C	arry forv	vard	4	6	0	
			0						

Produce. Wheat 24 bushels, at 6s. 6d 7 16 Straw 2 0 10 Clover, first crop, 3t. 10s.; second 2t 5 10	0 0 0
Add 10 per cent. on 4l. 6s 0 8 Add farmer's profit per acre, or about 10 per cent. more - 0 10 Expenses - £5 4 Produce. Wheat 24 bushels, at 6s. 6d 7 16 Straw - 2 0 Clover, first crop, 3l. 10s.; second 2l 5 10	0 0
Add farmer's profit per acre, or about 10 per cent. more 0 10 Expenses - £5 4 Produce. Wheat 24 bushels, at 6s. 6d 7 1 6 Straw 2 0 Clover, first crop, 3t. 10s.; second 2t 5 10	0
Add farmer's profit per acre, or about 10 per cent. more 0 10 Expenses - 25 4 4 5 4	0
Produce. Wheat 24 bushels, at 6s. 6d 7 16 Straw 2 0 10 Clover, first crop, 3t. 10s.; second 2t 5 10	_
Expenses - £5 4 Produce. ### ### ### ### ### ### ### ### ### #	_
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Wheat 24 bushels, at 6s. 6d 7 16 Straw 2 0 Clover, first crop, 8l. 10s.; second 2l 5 10	
Straw 2 0 Clover, first crop, 3 <i>l.</i> 10s.; second 2 <i>l.</i> - 5 10	d.
Clover, first crop, 3l. 10s.; second 2l 5 10	0
	0
0 . 0	0
Oats 6 quarters, at 20s 6 0	0
Straw 1 10	0
	_
1/2 16	0
Average produce 5 14	0
Expenses 5 4	0
Rent of one acre - £0 10	

The rent is here ascertained upon a middling clay soil at a moderate distance from the homestead, and with good roads for communication. If the soil be thin and of bad quality, deductions must be made according to the reduced quantity and value of the produce. It is evident from the above estimate, that when the average produce of an acre of land does not exceed 5l. 4s., the cultivation will pay very little rent, the expenses on good and bad land being nearly the same. The rent should advance as the value of the produce rises above that sum.

The following scale is regulated by the comparative value of produce, to show the variation of rent on inferior soils:—

	£	s.	d.	8.
Average produce	6	0	0	Rent 16 per acre.
_	5	10	0	_ 8 _
	5	0	0	- 4 -

A scale may also be formed to regulate the rent of such lands by the price of wheat, by the same method adopted for lands of the best quality.

\mathbf{At}	58.	Rent	68
_	6s.	_	10s
_	7s.		14s

And so on, increasing or diminishing 4s. per acre for every 1s. per bushel of variation in the price of wheat; a corresponding alteration being understood to take place in the value of labour and in the cost of other articles, which very seldom happens, but which ought to be steadily borne in mind.

Having fixed the rent of the best land on the farm at 11. 11s. per acre, and the worst at 10s., the value of the intermediate qualities may be readily found by comparison; and the rent of each field on the farm may be stated as follows:—

		Acre	3.	8.				£	ε.	d.
No. 1.	-	15	at	12	per acre	-	-	9	0	0
2.	-	15		22		-	-	16	10	0
3.	-	15		31	_	-		23	5	0
4.	-	15		24			-	18	0	0
5.	-	15		28		-	-	21	0	0
6.	-	15		28	_	-	-	21	0	0
7.	-	15		28			-	21	0	0
8.	-	15		20		-	-	15	0	0
9.	-	15		10		-	-	7	10	0
10.	-	15		18		-	-	13	10	0
11.	-	15		10	_	-	Ļ	7	10	0
12.	-	15		10		-	-	7	10	0
13.	-	15		10		-	-	7	10	0
14.	-	15		12		-	-	9	0	0
15.	-	15		14	-	-	-	10	10	0
16.	-	15		30		-	-	22	10	0
	-						-			
		240	at	19	per acre,	is	£	230	0	0
	_						_			

By this estimate the rent of the farm averages 19s, per acre, exclusive of the houses and the homestead. The amount is carried forward and added to the rent of the buildings.

VIII.

RENT OF BUILDINGS.

The farm-house and buildings are now to be valued and added to the rent. It is objected by many persons that no rent ought to be fixed on such buildings, alleging the impossibility of holding a farm without them, or of profitably occupying them without the possession of the land. The accommodations of a dwelling-house, of barns, sheds, stables, and gardens, are indispensable to the occupation of a farm; and when land is rented, it seems reasonable to conclude that the buildings should be thrown into the agreement. Lands can be let without buildings, but not profitably or for any length of time, except as grass lands for moving and pasturing; and a great part of our soils is wholly unfit for that mode of management. The value of buildings appears in the difference of rent obtained from lands provided with them, and from those where none are erected; such buildings are valued at a low rate compared with shops or other trading houses, because it is considered they are partly valued in the rent of the land to which they are attached, and because in most cases farms could not be let without them. There will be a difference of rent between a farm that is provided with suitable and convenient buildings, and one that has inconvenient and bad accommodations, and substantial buildings must be erected or the old ones repaired at the owner's cost. Old buildings that require frequent and expensive repairs should bear no rent; and the probable outlay must be borne in mind in fixing the rent, if the expenditure falls upon the tenant by agreement.

The rent of buildings is usually found by making an estimate of what they would cost when erected, and reckoning a per-centage upon the money expended by the landlord. If built within 20 years, 5 per cent. is charged upon them as a poundage; and after a building has stood 20 years, this poundage is generally reduced to $2\frac{1}{2}$ per cent. The readiest way of finding the original cost is, to measure the ground upon which the building stands, and to judge by the height and appearance what should be allowed per square yard.

The house on the farm, for instance, measures 13 yards square, or 169 superficial yards, and is a good substantial building, two stories high, erected about 40 years ago, and would probably cost at that time 3 ℓ . per square yard = 507 ℓ .; which, at 2½ per cent., amounts to 12 ℓ . 13 ϵ . 6 ℓ . for the yearly rent. The other buildings were erected at the same time. The two beast-houses and the turnip-house have hay-chambers over them. They measure 144 square yards, and would cost about 30 ϵ . per yard in building, which amounts to 216 ℓ .;

and at $2\frac{1}{2}$ per cent., makes 5l. 8s. of rent per annum. The two barns and stable occupy 315 square yards, which, at 30s., is 236l. 10s.; at $2\frac{1}{2}$ per cent., is 1ll. 16s. of annual rent. The riding-horse stable and pig-house, with the chambers over them, measure 60 square yards, at 30s. per yard, — is 90l.; which, at $2\frac{1}{2}$ per cent., is 2l. 5s. The other buildings will amount to a vearly rent of 21s.

		£	s.	ď.	
Annual rent of the fields -	-	230	5	0	
Ditto the house	-	12	13	6	
Ditto two beast-houses and turnip	-				
house	-	5	8	0	
Ditto two barns and stable -	-	11	16	0	
Ditto stable and piggery -	-	2	5	0	
Ditto shedding	-	2	6	0	
Ditto other buildings	-	1	1	0	
Ditto garden, orchard, and fold-yard	-	2	10	6	
				_	
	£	268	. 5	0	

Another method consists in allowing a space of ground, say two acres, to be oc-

cupied by the farm-yards, dwelling-house, garden, and orchards, and charging upon it the average rent of the farm, if not included in the general measurement. The necessary buildings on a farm of 250 acres may be reckoned to cost about 700\(\ell\); and allowing 5 per cent. on the outlay — about the half of what may be expected from buildings occupied in trade — the result will be about 37\(\ell\), as a rent for the accommodations, differing very little from the previous calculation

In making these valuations, attention must be carefully directed to the arrangement and convenience of the buildings, to the proportion they bear to the size of the farm, and if they be suitably disposed for the purposes intended. It must be seen that they comprehend all the erections necessary, for the profitable occupation of the farm, and that they are in good and substantial repair. If this be not found the case on inspection, the repairs required must be executed; any thing wanting is pointed out; and if agreed to by the landlord, it is performed to the satisfaction of the tenant, and of the mutual inspectors. Some knowledge of building, experience in planning, and skill in arranging farm-houses, are required to enable any person to discharge such an employment with judgment and usefulness. No department of rural economy is open to greater improvement at present than the planning and arranging of buildings adapted to the different circumstances of farms, and on no point has money been expended to less advantage. The division of farms, the planning, placing, and erection of the buildings, seem to have been executed by chance, or by circumstances in which judgment and utility had no control. This state of things having been once settled, alterations for the better are slowly introduced. The expense required to remove or alter buildings forms an insuperable barrier to their amelioration;

when a building fails, it is repaired or rebuilt on the same spot at the easiest rate calculated to serve for the present time. For this reason, an opportunity is seldom afforded of erecting a suitable steading according to modern ideas on the subject. The elegance of farm-buildings above plain roofing and walling depends wholly on the taste and ability of the proprietors, and in an economical point of view should depend on the value of the land; for it is evident that inferior soils cannot afford such outlays as more valuable lands, though there exists no reason that buildings on inferior soils should not be executed with the same view to convenience and durability, though on a more economical scale. But it is very rare to see a substantial and convenient range of farm-offices; for even where large sums of money have been expended in erecting extensive buildings, the most glaring blunders in contrivance and in reduction of labour by the convenient juxtaposition of

the individual erections, are every where to be found. The proprietors who have been induced to erect new buildings or to renovate the old on modern system, have been generally carried away by the absurd opinions of architects, who, however well skilled in planning dwelling-houses and in erecting splendid edifices, experience has shown to be wholly wanting on the point of farm buildings. The planning and arrangement of a number of houses to suit the single and combined purposes required, can only be understood by persons intimately acquainted with the practice and details of the business by a long and constant occupation.

An intimate acquaintance with any business, by education, by study, by experience, and by practice, is most essentially necessary to enable any person to discharge the duties of a profession with credit and advantage; and the planning of farm buildings, simple as it may appear, requires a thorough knowledge of the practice of agriculture, by which to judge what erections may be required in different localities, the uses to which the buildings are to be individually applied, and then how to connect them so that each may contribute to the general purpose in the most profitable manner, by affording the greatest possible convenience with the least possible labour.

IX.

TILLAGES.

THE word "tillage" comprehends ploughing, harrowing, fallowing, manuring, and all the other operations performed during the process of cultivating arable land. There is no direct law to point out the extent of the tenant's claim for the tillages that may remain unexpended at the time he quits possession of land, except when held by lease or other agreement; and unless he can prove that he or his predecessors paid such allowances at the time of entry, he is entitled by law to none at his removal. This observation applies to tillages only: as to the crops growing at the time of quitting, there prevails a custom founded on an ancient law, that "he who sows shall have the emblements,"-that is, he shall have the crop itself, or the value, to which

the tenant is undoubtedly entitled, if sown before he receives a notice to quit possession. But if the tenant sows after receiving a notice of removal, the landlord can reap the crop; because the term of holding was fixed. the tenant was apprised of it, and he has no right to sow corn, when he knows he will not be in possession at the time of reaping, unless agreed upon and covenanted for by established usage or by special contract. The law makes a distinction between a tenant for life, and for a term of years. A tenant for life, or his representative, is entitled to the crops he has sown and not reaped, and which are growing at the time of his demise; because the time of expiry of his tenancy is contingent and uncertain, and not determined by his own act or deed, but by the frail tenure of human life. But a tenant on lease for a term of years, or by a yearly holding at will, is not entitled to the crop unless contracted for; because the expiration of his term depends on a

certainty fixed and fully known to him.
"Every one who has an uncertain estate
or interest, if before severance of the corn
his estate determine, either by the act of
God or of the law, he shall have the emblements, or they shall go to the executor
or administrator; and so it is in all cases
regularly, where a man sows land, whereof
and wherein he hath such an estate as may
perhaps continue until the corn be ripe."
(Williams's Farmer's Lawyer, page 193.)

This law, however, is only applicable to cases where no lease or agreement exists containing stipulations of allowances to the quitting tenant; and though it appears that even in these cases the crop can be demanded by the strict letter of the law, it is always valued or given to the tenant; for the law of universal usage and understanding, and the agreements entered into for the special purpose of regulating such transactions, have long ago rendered unnecessary any appeals to such absurd and contradictory enactments. If justice has stamped any one of its maxims more indelibly than another, it is this, "that he who sows shall reap, and that he who labours shall be paid;" and the absurdity of a law remaining in force that would deprive labour of its fruits, and being intended as the last appeal, can only be accounted for by ranking it among the anomalies and contradictions every where found in the laws that have been enacted for the regulation of human affairs, and which are often opposed to justice and common sense. It is true that agreements supersede law; but it is certainly absurd enough to have law and practice completely at variance, when that practice is sanctioned by universal usage, and by every maxim of justice and equity. The mischief that would accrue from the operation of such a law, is evident; cultivation could not go on, or would be most ruinously interrupted; and hence arose the necessity and the adoption of agreements on the subject, in correspondence with the advances made in the improvement of the art.

ON GRASS LANDS.

The portion of the farm left in grass at the term of quitting is often matter of dispute, in the absence of any stipulations on the subject. Some agreements enjoin one third, and others one fourth of the farm to remain in grass, and not to be ploughed or converted into tillage without a written leave from the landlord; while in the grazing counties, one half is prescribed, and on some poor soils, as much as two thirds. If there be no written agreement, or if it be silent on this point, it is understood that the tenant must leave as much land in grass when he quits the farm, as he found when he entered upon it.

If the tenant ploughs any grass lands during his occupation, or on quitting does

not leave as much land in grass as he found on entering, he is liable by the law on that point to remunerate the landlord for the damages thereby sustained. The amount of such damages is usually ascertained by charging half rent and taxes, two dressings, an average allowance of clover seeds and hay seeds, sowing and harrowing, which may amount to between 3l. and 4l. an acre. Many agreements stipulate for 5l. an acre, and some valuers contend for that allowance in the absence of any agreement. This question admits much controversy, and has been more frequently the subject of dispute than any other matter in the settling of claims and dilapidations. If the tenant has laid down any grass land during his tenancy, it is not taken as such, unless laid down with the proper seeds, after a fallow well cleaned and manured. some estates, it is customary to allow for grass lands that may be laid down by the tenant in addition to the stipulated

quantity, which, if it has not been mown too often, and if it has been well managed, is paid for by the rate above mentioned: but if found to be in a slovenly state, one half or two thirds is allowed, as the case may require; and if the appearance of the management justify the supposition that it has been laid down, merely with a view of raising some money from the valuation at a trifling cost, no remuneration will be allowed.

Leases and agreements most frequently mention the names of the fields, and the quantity of acres in each, that are to be kept in permanent grass and not to be ploughed; and, consequently, any improvements the farmer can effect must be by draining and top-dressing, if necessary. If the farmer lays down more land, the allowance per acre may be expressed; and by clear and correct definitions, much cavil and dispute may be avoided.

ON FARM-YARD DUNG.

Considerable difficulty is experienced in ascertaining, with any degree of truth, either the quantity or quality of manure that has been incorporated with the soil during fallowing, and more especially after a crop has been taken. It is expected that the out-going tenant will state, honestly and conscientiously, the quantity that has been applied; but he is much interested, and the valuer for the opposite party must examine the appearance of the growing crop, and also the manure that remains unexpended on the soil; and by making a general estimate of the whole quantity produced on the farm, an idea may be formed, if the quantity stated be overcharged, by considering what portion could be got from the previous crops. The straw grown on an acre of land is generally calculated to produce about four loads of dung; and if the quantity claimed exceed this proportion, it may be presumed that a mistake has been committed, or that the crops have been more than usually abundant. A farm will produce more straw in some years than in others, owing to the season, and to a portion of the land of better quality being in The discretion and judgment of the valuer must be exercised on this point: inquiry may be made if any manure has been brought to the farm from any extranéous source, and if any superior local means exist of making it; for they are not bound to award to the quitting tenant any more than is probable, and can be reasonably accounted for, and what, in their judgment, could be raised from the farm under the usual course of management. The quality of the manure may in some measure be judged by ascertaining the number of cattle that have been fed upon it, and the quality of the food consumed; for the dung of wellfed animals is much superior to that produced by food of inferior quality. Straw

alone will produce dung of the meanest sort, or any other culmiferous crop, or even hay without the aid of green crops; and a variety of circumstances concurring to affect the quality of farm-yard dung, inquiry is necessary before coming to a conclusion on its value.

The value of manure is much ruled by that of farming produce; and one load of rotten dung, measuring 50 feet, or nearly 2 solid yards, and weighing about 11 ton, is, in most situations, of the same value as a bushel of wheat, exclusive of the cost of carriage. Contiguity to towns and villages, convenience of roads, and other causes, have the usual effect in the case of dung, as in that of all other marketable commodities, -increasing or diminishing the price accordingly. Farm-yard dung is thrown into a heap and measured as a solid body, by taking the length and breadth with a tape or a yard stick, and the depth with an iron rod. The depth must be particularly noticed, for a few inches of variation in taking that dimension will make a great difference in the total quantity. The quality may be inspected by removing with a fork a portion of it in several places, down to the bottom, where, if any part of it be inferior, it is generally placed. As long as fermentation lasts, the heap will continue to settle; and if newly turned over, one third, and sometimes one half, is deducted from the contents, to allow for the future diminution. The time that dung has been in the yard, and the materials of which it is composed, occasion much difference in that respect, which should be examined, and have due influence in fixing the price. At least two weeks should elapse before dung is measured, after it has been turned or thrown into a heap, as before that time it will not be settled down into a measurable state. Dung moved from the place where it has lain requires time to ferment and rot, and most valuers refuse to measure it till the expiry of two weeks after it has been moved; and the same rule is observed for sale manure in towns. In large valuations, where great accuracy is required, one person is usually employed to measure for both parties; but in small concerns it is generally understood the valuers themselves perform the measurement. The length, width, and depth are taken in feet and inches, and are multiplied into each other by duodecimals, —which mode is generally used, though, by converting the fractional parts into decimals, the process may be considerably simplified.

Suppose a dunghill is 54 feet 5 inches in length, 23 feet 9 inches in width, and 3 feet 2 inches in depth; how many solid yards does it contain? and what is the value at 4s. per yard?

Ft. In.
$$54 . 5$$
 $. 5$ $. 5$ $. 9$ $. 40 . 9$ $. 9$ $. 171 . 7$ $. 7$ $. 108$ $. 29$ $. 4$ $. 3 . 2$ $. 215 . 4$ $. 3 . 2$ $. 215 . 4$ $. 3877 . 0$ $. 0$ $. ($\frac{1}{3}$=4s.)

Ft. in a solid yd. $. 27$ $/4092 . 4$ $. 4(51\frac{1}{3}$ cubic yards. $. 27$ $. 27$ $. 28$ $. 40$ 6 value. $. 27$ $. 27$ $. 28$ $. 28$ $. 29$ $. 28$ $. 29$ $. 29$ $. 30$ 6 value. $. 27$ $. 27$ $. 27$ $. 28$ $. 29$ $.$$$

Thus it appears that a dunghill of the above dimensions, and of a quality worth 4s. a yard, may be estimated at about 30l.

ON LIME.

Lime is measured by the chaldron, or by the dozen, by the quarter, and by the bushel,

and by the barrel of 3 bushels. A chaldron contains 4 quarters, or 52 solid feet; one dozen contains 48 feet; and one ton, 34 feet. It is most generally applied to land during summer fallowing, or in preparing for green crops, in quantities varying from 3 to 7 chaldrons per acre. On no point in modern agriculture does more vague uncertainty prevail, than on the use and application of lime. The most experienced and best informed agriculturists are yet in the dark, as to any definite rule by which the utility of it can be secured on different soils and in different circumstances. No inference has yet been drawn, either from practice or science, to guide the farmer in applying it to the land; and it is yet used by fashion, by the caprice or individual judgment of the farmer, without any certain knowledge that a result will be produced. It has been thought that lime acts most beneficially on fresh soils which contain vegetable matter for decomposition, and

that its effects are in a direct ratio with the quality of the land. On light soils of all kinds, the benefit of lime is very doubtful; in such cases small doses often repeated are thought to be more beneficial than the application of large quantities. Lime contains in itself none of the elements of vegetation, but it is supposed to act as a stimulant or alterative on the substances contained in the soil, and on the manures applied. On these points, however, no certainty exists; but it is well known that lime has produced great effects in some cases, and that in others, though used by the most approved modes of application, no benefit whatever could be observed on any of the crops. On old arable lands, the effects are very doubtful; when used on such soils, it should be applied in a hot caustic state, along with a liberal allowance of putrescent manure, on fallows well wrought and cleaned. On inferior soils, a well-prepared compost of lime and earth will be found

more useful, either on fallows or on grass lands, than an application of lime alone.

In valuing the tenant's claim for lime laid upon the land within the time allowed for its influence in different situations, the skill and judgment of the valuer must be exercised in determining if the land has been prepared, and the lime applied in the way that is understood to be the most likely for the lime to benefit the land, because the value of the remaining tillages depend entirely on the probable effects it may produce on the future crops. Opinions differ very much as to the time that lime may remain unexpended on the land. Some time ago it was held that ten years was not too long a period to allow for the influence of lime upon grass, and four white crops on arable lands. That period has now been reduced to six years, and divided as follows, viz. if the lime has been applied only for one year, five sixths of its value is due to the off-going tenant; if two years, two thirds; if three years, one half; if four years, one third; and if five years, one sixth of its value; and then the valuation ceases. It is generally supposed that the effects of lime cease much sooner on arable than on grass lands; and accordingly the custom of the country usually allows the same valuation as for manure, viz. whole tillage after fallow or turnips, and half tillage after one white crop, -and after the land has carried two white crops, no valuation is due. The expense of carrying and spreading the lime is added to the prime cost, which, if the distance be great, will add much to the value of the dressing. When the distance exceeds three miles, 10d. or 1s. a mile is thought to be a moderate charge for a chaldron; but this charge must be varied by the price of labour and other localities. The turning over, watering, and spreading on the land are reckoned at 1s, and 1s, 6d. per chaldron; but this item of expense will vary much, as it is performed in different

ways. Some farmers lay the lime on the land in small heaps, and spread it out when it has fallen into powder by exposure to the air. Others lay the lime in one or more large heaps, and allow it to lie for six or twelve months for the lime to fall. then carry it out, and spread it from the cart. The quickest and most approved mode is to lay the lime in a long heap or heaps on the head-lands, to turn it over and reduce the lime by water in two or three days after being laid down, and then to spread it on the land in that hot caustic state, and cover it by harrowing. The land is then ready for ploughing or drilling, and the harrowing prevents the lime being blown away by the wind. In either of the methods, the expense will be valued by the labour bestowed.

ON RAPE DUST.

The properties of rape dust as a manure have been but lately known, and it is yet used only in a very few places. It possesses very quick vegetative powers; and when applied on young corn, it speedily produces a great luxuriance, — being most active in warm showery weather. Its powers are soon exhausted; and it is consequently unfit to support a rotation of crops, and is usually applied to spring crops, with the view of immediate benefit. When used on fallows, it is customary to apply along with it manures of a more durable nature.

In valuing tillages before a crop is produced, the full cost is allowed, including carrying, spreading, and all other expenses incurred in procuring and applying it. Full tillage is also allowed after turnips, if they have been eaten on the ground by sheep, on the supposition, that though the rape dust may be exhausted in producing the crop, the quantity would be more abundant, and more dung would be made. When rape dust has been used on turnips which

have been drawn off the land, it is supposed that two thirds of its strength is exhausted and removed with the turnips, and consequently one third of the cost, without labour, is allowed to the quitting tenant. The same allowance is given when one white crop has been taken after turnips eaten on the ground, and for one white crop in any case.

ON SOOT.

Soot is a very powerful manure; its great basis is charcoal in a state of solubility by the action of air and water. It contains also salt of ammonia, with a portion of oil, and its alkali tends to make the oily particles miscible with water. To mix soot with lime is a bad practice, because much volatile alkali is thus disengaged without any benefit to the land. Soot requires no preparation, is well fitted to be used as a top dressing, and is applied in quantities varying from 20 to 80 bushels on spring

crops of corn, tares, and on young turnips; and being an active manure, it never fails in producing very beneficial effects. Being applied in March and April, it seldom comes under the valuer's notice, as one crop consumes the value of all such transient manures as do not produce the effect by being mixed in the soil. When applied to protect young turnips from the fly, it is supposed to act at the same time as a manure for the turnips; and in that case one fourth of its substance is thought to be left in the soil, if the turnips have been eaten on the ground by sheep; but when drawn, no valuation is allowed.

ON MARL.

Marl is a kind of soft fossil earth, used as a manure on sandy, gravelly, and light soils, in countries where it can be procured. It is chiefly composed of clay and carbonate of lime, and is valuable according to the calcareous and oily qualities it contains. The solubility, and the property of effervescence with acids, denote the quality of marl; and it is found of various colours,—blue, grey, red, and yellow,—of which the first and last are most valuable. About 40 cubic yards are generally allowed for manuring an acre, which will support a rotation of four crops, and grass a few years longer. The quality of the marl, and the customary course of cropping, determine the length of these terms.

No valuation is allowed for marl got on the farm where it is used,—the out-going tenant being paid for expenses only; but where it is brought from another property, the price of the material and the usual expenses are allowed as for dung or any other manure.

ON BURNT EARTH OR CLAY.

This substance is sometimes used as a manure, and is obtained by burning clay found on the farm, and is valued according to the labour and expenses that have been incurred. Full tillage is allowed when applied on fallow or turnips, and if valued before producing a crop; and half tillage after one corn crop; and after two crops, the valuation ceases.

Burnt earth and burnt clay differ much: the former contains vegetable matter; and the advantage of burning the latter is very questionable, unless lime and vegetable matter be burnt with it. Some writers reckon it a topical remedy; and when burnt alone, that dung or some other manure, containing vegetable matter, should be applied at the same time. In fixing the value, the quality of the constitutional ingredients, and the mode in which the incineration has been performed, must be borne in mind: if the material be found on the farm, the cost of labour and fuel is only allowed; but if brought from other property, the cost of material and of carriage is added.

ON BONES AND BONE DUST.

Bones consist chiefly of phosphate of lime, and decomposible animal matter, and are used as a manure on fallows, grass lands, and for turnips, but are found not suitable for clays. A valuation of six years is allowed for them when laid on pasture, and four years on grass lands successively mown; and in some places, ten years for pasture, and six years on mown grass; and four corn crops, or six years, on arable lands. In other places, a longer period is allowed. After one white crop has been taken, two thirds of the prime cost and of the expenses are allowed; after two white crops, one third is awarded; and after three years, the valuation ceases.

On the supposition that bone dust must be sooner expended than the crushed bones themselves, it has been thought reasonable to allow one tillage more for the latter than for the former; and the dust is accordingly subject to the same valuation as dung, and determined by the four years' course of cropping.

ON COMPOSTS.

Composts are mixtures gathered together in order to form a manure, and are generally composed of earths, clays, sand, and vegetables, with a suitable mixture of lime: if intended for grass lands, the heaps should be frequently turned, and well broken and pulverised, that the particles may soon get mixed and incorporated with the lime in the heap, and afterwards with the sward: the application, when properly performed, is attended with much success, and enriches the herbage much more than if the ingredients had been applied singly in the original state.

In making a valuation of composts, it is necessary to ascertain where the materials have been procured: if brought from a distance, the cost of material and of carriage is allowed, and also of mixing and spreading; if got on any part of the farm under the same tenure, nothing is given for the cost. On arable lands, the tillages are expended by two crops of corn; and on grass, by being twice mown, or four years in pasture.

A number of new manures have been lately introduced, mostly of artificial composition, and very transient in their nature and effects. Valuations upon them will be regulated accordingly, as in soot and rape cake.

ON DRAINING.

It has long been customary, in many places, for draining to be executed by the landlord and tenant jointly,—each party bearing a share of the expense of the work: the period of ten years has been fixed, to which a valuation for draining may extend, deducting one tenth of the expense of the drain for every additional year it has been executed. If it has been made for one year, nine tenths of the expense is allowed; if for two years, eight tenths; if for three years, seven tenths; and so on, till the expiration of ten years, when the allowance ceases. In some districts, the valuation is extended to twelve years; and if, upon examination, the drains be found to have been judiciously planned and properly executed, an encouragement is thereby given to a most important branch of agricultural improvement; in other places, the landlord allows the tenant one half of the expense at the time the drains are finished, and such stipulations are usually mentioned in the agreement of holding: few farmers will commence draining towards the termination of a lease, unless the remuneration be fixed. or he has a prospect of holding until the expense be repaid by the superior crops he may expect.

In the modern system of tile-draining, the tenant, in some places, executes the draining, and gets the tiles from the landlord; in others, the farmer pays one half of the expense, - and not unfrequently the whole expense, on a length of lease sufficient to warrant the outlay; and it is also customary for the landlord to execute the whole work,-the tenant being at the expense of drawing the tiles, and paying 5 per cent. on the expense per acre: this expense may be averaged at 61., which will cost the farmer 6s. an acre in addition to his rent. This is an excellent arrangement: the landowner, having a permanent interest in the land, is secured, by his own workmen executing the draining, against any imperfect performance of the work: the charge is light upon the farmer; and at the end of twenty years, the expense is repaid, and the land to be relet at an improved value of at least one third, and in many instances of one half. This system, if generally applied to all wet soils, will constitute one of the greatest improvements of modern times.

In valuing drains, the cost of materials

used in filling, and the expense of cutting and setting, are computed; but if the material be on the farm, no value is allowed for it. One load of stones is usually allowed to fill five or six yards in a common-sized drain, which, in general cases, will cost about 2d. per yard for cutting, setting, and filling, -due allowance being always made for hard soils, and if the drains be above or below the usual depth. No valuation can be claimed by law for such labour, unless allowed by agreement, and unless the farmer has paid such allowances on entering to the farm; for if the farmer commences such work without an understanding on the subject, he must look for remuneration from the expectations which induced him to commence it, which must have arisen as much from the increase of produce he anticipated, as from any allowance that might be made him.

The expense of furrow draining at six yards apart may be stated as under:—

	£	s.	d.
An acre will contain nearly 130 rods, of			
6 yards, at 4d. for cutting, and filling,			
2 feet deep	2	3	4
2500 tiles, at 20s	2	10	0
	_		_
Expense to the proprietor	4	13	4
.£ s. d.			
Carrying 2500 tiles, at 5s. per			
1000 0 12 6			
Straw or other material to cover			
the tiles 1 0 0			
Expense of the farmer £1 12 6	1	12	6
			_
Total	£6	5	10

The cost of labour, and the price of tiles, and also the distance of the drains apart, will alter the above estimate in different localities; but 6*l*. an acre may be taken as an average, at the distance of six yards, which appears to be suitable for most soils.

Whenever stones can be procured, they form the most preferable drain, filled to 15 inches: they form a cavity infinitely superior to the tile alone, over which the earth will soon consolidate, deny a passage to the water, and show afresh the old blunder of deep filling with earth. Fifteen inches of stones, and 15 of earth, will form a most durable and effectual drain. The cost will vary from 5l. 10s. to 6l. 10s. per acre.

ON PLOUGHING.

The operation of plonghing seldom happens to be valued by itself, being generally included in what is called a dressing for land; but in valuations made at Candlemas, the winter furrow may have been given to land intended for fallows, and in that case a value per acre is allowed, when it is seen that the labour has been well performed and must prove beneficial.

It is generally expected that, on quitting a farm, ploughing shall be avoided as much as possible, that the in-coming tenant may rope the land according to his own judgment: this neglect of winter ploughing subjects the land to bad management for that year, for no spring furrow will compensate for the want of winter ploughing, and the in-coming tenant can very easily mention what lands he wishes to be ploughed, and which could be done by the out-going tenant, so as not to interfere with his engagements elsewhere: such arrangements are necessary, that the cultivation of the land may be deranged as little as possible by the change of occupants. In a Michaelmas entry, the value of the labour of ploughing, and sowing, and harrowing a clover ley with wheat, is allowed by the customary rates.

Ploughing is now mostly performed by a man and two horses, some stiff soils requiring three with a boy to drive, and in many places, four are yet used. In all stiff soils, it will be found very beneficial to use a strong power in giving the winter furrow, and for the additional strength used beyond that of a man and two horses, due compensation must be allowed by the valuer. It has been shown before that a man's daily wages may be averaged at 2s., and the value of the labour of a horse, including a charge for tear and wear, may be stated at 2s. 6d.; consequently when a man and two horses plough one acre a day, it will cost about 7s.: if only 3 roods, the charge will be 9s. 4d., and so on, increasing or diminishing as the land is stiff or loose, wet or dry.

ON DRESSINGS.

The operations and expenses of fallowing have been already explained, and the average cost has been shown to be about 12s. 3d. an acre; but this calculation was made for loamy lands. If the soil be stubborn and the situation hilly, so as to require more strength than was calculated upon to perform any part of the tillage, it is a reasonable custom that the out-going tenant shall be remunerated accordingly. On level soils it is usual to allow 11s., and in more awkward

situations 12s. or 13s. for each dressing; but these rates are evidently low.

In allowing for dressings, the valuer for the in-coming tenant must examine the soil, and be able to judge competently what quantity of labour would be required to bring such a soil into a proper state of cultivation, and if that quantity has been expended, and judiciously. Five dressings are usually reckoned for a clean fallow, including the seed furrow; but if upon examination the valuers be of opinion that the fallowing is imperfect, from three to five dressings will be given according to their judgment. No more than five are ever allowed; because if previous mismanagement has rendered more than ordinary cultivation necessary, the in-coming tenant cannot by any means be held liable to pay for it, and the extra labour must be charged upon the party who created it. If land be neglected after one or two dressings have been given, and should it appear to be in as bad condition as before the ploughings, no allowance will be made.

Dressings are divided by the ploughings, and
the seed furrow with the harrowing, is one;
therefore on half-tillage land, only two
dressings are valued.

FULL TILLAGE.

By a full tillage is meant, when land has been completely wrought and cleaned, and the tenant's right valued before producing a crop; which consists of rent and taxes, manure, dressings, the seed sown, if any, and the labour. Land is also said to be in full tillage, when turnips, rapes, or other green crops, have been consumed on the ground by sheep after a fallow, deducting one half of the value of the crop from the cost of manure, dressings, rent and taxes, seed and hoeing.

RENT AND TAXES.

Rent and taxes are computed by adding together the yearly rent of the farm, and the assessments for the church, the poor, and the highways, and dividing the sum by the number of acres in the farm, which gives the average rent and taxes for one acre. This is an easy mode, and attended with little trouble, and will prove sufficiently accurate when the land on the whole farm is nearly of equal quality, and if the whole farm be valued; but if one or two or more fields be valued separately, it will be necessary to compare the quality with that of the whole farm, and fix a proportionate rent. The assessments will also require to be divided according to the quality of the land.

It has not been customary to include the value of the carriage work performed on the highways, on the supposition, or rather on the quibble, that it was not an assessment, but labour in lieu thereof; but labour performed is the same as money paid, and ought to be calculated as such. The custom prevails only in some districts; and where agreements did not mention the value, it was omitted in the appraisements. By act of parliament it was provided that a team of three horses and two men shall be employed on the highways in the township or parish for six days for every 50l. of yearly rent, if necessary; and persons occupying farms of less value may either do a proportionate quantity of work, or if the overseer shall think proper, shall pay 1s. 6d. in the pound of rent as an equivalent. By a recent act (5 & 6 William IV. cap. 50. s. 29.) the statute duty is wholly converted into a money charge, to be levied at a certain rate in the pound of yearly rent, and which rate shall in no case exceed 10d, in a single rate, or 2s. 6d. in the pound, except with the special consent of 4ths of the ratepaying inhabitants, and may be varied below that sum as occasion may require. This enactment will place the charge as any other assessment, and is a very excellent alteration, and long wanted; and if followed by the appointment of professional persons capable of superintending the roads in a district as extent and convenience may point out, it must be attended with very beneficial results. The making of roads constitutes the first improvement in any country, and claims the undivided attention of the individuals who may be engaged in that occupation. The beneficial effects that have attended this plan, where it has been adopted, fully show the utility and advantages; and the conversion of the labour formerly performed affords a fair opportunity of deriving the utmost benefit.

ON TURNIPS.

Turnips belong to a class of plants that have a very tender germination, and are consequently exposed to the attacks of many deadly enemies. But a crop of this plant has been found to be so valuable, and the cultivation required to produce it to be so beneficial to the succeeding crops, that every exertion is used to secure a crop on soils where any chance of succeeding exists. No cure or preventive has yet been found to protect the turnip plant from its many enemies. Several expedients have been proposed with little success; but as green crops constitute on all suitable soils the foundation of profitable cultivation, the raising of them is indispensable. Where the soil will by any means admit, they enter into every rotation of cropping, and will consequently almost every where meet the valuer.

In making the allowances for turnip crops, a very just distinction is made between a crop eaten on the ground, and when drawn off and consumed in the yards. On light lands, this distinction is rendered more necessary; and in case of bones, or rape dust, or any other transient manures being used, eating on the land should be understood, or a corresponding deduction must be made in valuing the tillages unexpended. But

even where putrescent manure has been applied, a difference is made, from the sunposed benefit the land must derive. For the full crop of turnips eaten on the ground. the whole amount of rent and taxes, dressings, manure, turnip seed, and hoeings, during the whole process of fallowing, are allowed, deducting one half of the value of the turnip crop for the tillage exhausted by it. It may be doubtful, in the case of farmyard dung being used, if tillages be consumed equal to half the value of the crop; for if the eating on the ground be reckoned equal to the manure and tillages exhausted, it seems reasonable that no deduction should be made, and that the tillages should be valued as for a bare fallow. But the best season for sowing wheat is gone before the turnips are cleared off; and spring wheat and barley are seldom so valuable as a Michaelmas crop. The manure has also been sooner applied than for wheat, and may consequently be thought to be sooner

exhausted, and accordingly one half of the saleable value of the crop of turnips is deducted.

In valuing on lands from which turnips have been drawn, the dressings and half the manure are reckoned to be unexpended; but nothing is allowed for rent and taxes, as they are supposed to be included in the crop: or, which will frequently make the same amount, the rent and taxes, manure and dressings, may be calculated in full, and two thirds of the value of the turnip crop deducted. When turnips are on the ground at the time of valuing, and it is agreed that they be transferred to the incoming tenant, half the value eaten on the ground by sheep is to be added to the dressings, and all the manure applied during the fallowing. The crop is, by another method, transferred by charging the incoming tenant with the whole of the expenses incurred during fallowing. This plan is liable to the objection of paying as much for a bad crop as for a good one, and is not much used except in cases where the crop is young, and the true value cannot be known.

ON CABBAGES AND MANGEL WURZEL.

These plants are raised for similar purposes as turnips, and on lands similarly prepared. The dressings and the manures used are much the same; and as the crops are removed during the early part of winter, the same valuations are allowed as for turnips drawn and consumed off the land. Beet must be removed before winter to preserve the crop from frost; and if cabbages be allowed to remain so long on the ground as to rob the land of sustenance, a corresponding deduction must be made by the discretion of the valuers.

ON POTATOES.

This is one of the most useful roots possessed by mankind, as food both for man and beast, and against which a very unfortunate prejudice yet prevails. Some philosophers ascribe much of the present misery of the human race to the use of it, and most farmers are of opinion that it exhausts in an uncommon degree the land on which it grows. Both opinions may be reckoned equally unfounded; the former is a mere frenzy, and the latter rests wholly on supposition. No plant yet known enters so largely into general use; yet in many places the cultivation is limited, and even prohibited by express agreement. But in several counties it is extensively cultivated both for home use and for exportation. The crop is very valuable, both for sale, for feeding stock, and for the excellent condition of the land for the subsequent crop. The plant is of much surer growth than turnips, and suitable for a greater variety of soils.

Land planted with potatoes is wrought and cleaned similar to turnip lands, and may require some more strength, as they are raised on stiffer soils, and are planted at an earlier season. But in most cases the same quantity of labour will be sufficient; and in dry and early climates, the spring work might be expedited by a part of the fallowing process being performed in the previous autumn after removing the corn crop. Dung in a fresh state is generally used for potatoes; and if the land be of a damp and heavy nature, it may be applied in a more strawy state, as it may keep the soil more open; but on warm and light lands it should be more rotted and moist, that it may lie close, and not render the hot soil too porous to heat and drought. Such manure may be reckoned of inferior quality to rotted dung; but as a larger quantity is generally supposed to be given in order to raise a crop of potatoes, the value may not differ much. But if it be ascertained that the dung was of very inferior quality, a deduction to that extent must be made.

The following estimate of the expense of cultivating an acre of potatoes, and of the value of the produce, is calculated on a clayey loam of middling quality, after a crop of wheat or oats:—

			£	8.	d.
Rent, tithe, and taxes, per acre	-	-	2	0	0
Four dressings, at 12s. 3d.	-	-	2	9	0
One drilling, at 4 to 5 acres in a d	lay	-	0	2	0
Manure, 20 loads, at 5s., carry	ring as	nd			
spreading	-	_	5	0	0
Seed, 30 bushels, at 1s. 6d.	-		2	5	0
Cutting and planting -	_		0	10	0
One drilling to cover the dung	_	_	0	4	0
Two scufflings		_	0	5	0
Two hoeings	_	-	0	6	0
One earthing	_	-	0	8	0
Raising the crop of 300 bushels, a	+ 9.7			10	-
Carrying to market 30 bushels a d			2	10	0
		lO.			
days, of a man and two horses,	at 8s.	-	4	0	0
			-		_
			19	14	0
Add 10 per cent.	-	-	1	19	6
					_
		£	21	13	6

Produce.

		£	s.	d.			
300 bushels, at 1s. 6d.	-	22	10	0			
Half manure remaining	-	2	10	0			
Half dressings -	-	1	4	6			
					26	4	6
					_		
Profit on pot	atoes	-		-	£4	11	0

In all such estimates as the preceding, different circumstances will always render alterations necessary: 10 per cent. may be thought too small a charge; but the above may be taken as an average of expenses and of profits during a number of years.

The following statement may show an average difference of the value of an acre of turnips and potatoes:—

		£	s.	d.	
An acre of middling land may produce					
an average of years 30 tons weigh	nt,				
at 12s		18	0	0	
Value of dung made from that quantity	-	8	0	0	
			_		
		26	0	0	
Deduct seed -	-	0	5	0	
		25	75		
	70	20	10	0	

	£	s.	
The same quality of land may yield 400			
	30	0	

Deduct value of seed - 2 0 0

28 0 0

Difference in favour of potatoes £ 2

The crop of potatoes is supposed to be sold; if consumed in feeding stock, as it should mostly be, especially in inland situations, the manure made would raise the difference to a great proportion. Cabbages and beet are of doubtful value compared with turnips; some writers asserting that they are much more valuable, and others maintaining the contrary. Soil, climate, and other circumstances must rule in this case as in every other, and make the superiority of each crop to vary in different localities. On all sands and light loams, turnips will take the precedence; while on stiff loams, the potatoes, cabbages, and beet

will be superior, especially in humid cli-

In valuing tillages in the spring on land from which the crop of potatoes has been removed, it is customary to award to the quitting tenant the value of the dressings and of half the manure that has been applied, excluding the rent and taxes. In some districts, it is usual to allow the rent, taxes, and dressings, and not the manure; and in others, half the value of the rent, taxes, dressings, and manure is thought an equivalent for the tillages unexpended.

If the valuers see just reason for coming to the conclusion that the quantity of manure applied has been too small, and also of inferior quality, and if the land on which the crop of potatoes has grown appear in a discreditable state of cultivation, little or no valuation will be allowed. When one white crop has been taken after potatoes, some valuers reckon the tillages to be wholly gone; while others contend that, under good

management in working and manuring, the land will carry another crop, and that one quarter tillage ought to be allowed. No general rule of application can be given in such cases, the same valuers seldom following one mode twice together, but determining the question by the alteration of circumstances.

The above customary allowances on tillages after potatoes, have been evidently formed under the influence of the general prejudice against the cultivation of the root. The only reasonable objection that can be urged is, that the crop is sold from the farm; but some produce must be sold, and grain crops are alike objectionable. They leave the straw, it is true; but that straw is of little value for manure, unless reduced by consuming green crops: and potatoes can be used in the yards as usefully as turnips in feeding stock; and the proper cultivation of the root works and pulverises the land, and leaves it in the finest possible tilth. It

seems reasonable, therefore, that the same tillages be allowed after potatoes as after turnips drawn and consumed in the yard; and in cases where the quitting tenant sows wheat after potatoes, the value of labour and of seed will, of course, be awarded him, in addition to the tillages; but this may very seldom happen, the land being most generally sown with barley, unless upon an understanding for that purpose between the parties, which would much tend to preserve the course of cultivation.

HALF TILLAGES.

When land has carried one crop of grain after a fallow or green crops, half the value of the rent, taxes, dressings, and manure expended in the year of fallowing, is due to the quitting tenant. But if the turnips be consumed off the land, one half of the dressings, and one fourth of the manure, are only allowed, and nothing for rent and taxes. If turnips be drawn off after rape-dust has been used, and then a crop of corn taken, and the tillages valued in the spring following, the value of the manure is supposed to be nearly lost, and one third of the cost is only allowed.

Five dressings are awarded for a full tillage, one of which is the seed furrow, the sowing and harrowing of the turnips; and the same rule holds in the case of wheats sown on summer fallows. In reckoning half tillages, therefore, it is usual to allow two dressings.

Clovers and other seeds are often sown on lands valued for half tillages; and in such cases the cost of the articles and of labour in sowing will be awarded, when the work is properly performed.

Grass seeds very often fail in producing a sufficient number of plants for a crop, and consequently the land is ploughed and resown with a crop of another kind. In such cases, it is customary to divide the expense equally between the out-going and in-coming tenant. It would seem very objectionable for the in-coming tenant to pay for a crop that does not exist: the custom has been established to secure the sowing of clovers; for if the quitting tenant knew that he would receive no compensation in case of failure, he would avoid the risk altogether by sowing none. The failure of clovers must be attributed to a fault in the cultivation of the land and in the rotation followed. If the latter be duly adjusted by alternation, and the land be kept in good heart by manuring and cultivation, and never reduced by over-cropping, grasses or any other seeds will seldom fail.

ON WHEAT OR CLOVER LEY.

In valuing clover leys, and bean and pea stubbles sown with wheat, it has been much disputed whether it should be valued as a crop, deducting rent and taxes, or only to allow

for labour, seed, and sowing. The quitting tenant cannot demand the crop by law, unless he paid for another on entry, or by an agreement containing a provision to that effect. If no proof can be adduced of such a crop being paid for, and if no provision be made on the point by agreement, the question is generally submitted to the decision of the valuers, who usually confine themselves to the prevailing custom of the district, which awards the crop to the quitting tenant, deducting one year's rent, tithe, and taxes. This custom has long prevailed; and though it would appear to be a just one, yet it has been found to give more value than tillages on land that has carried one corn crop, and on clover or beans after fallow, and consequently more than is fairly due for the tillages unexpended and the labour bestowed. Many agreements now exclude the custom altogether, or fix an allowance not exceeding 50s. or 60s. an acre.

The difference between the expenses and produce of the three crops that have been grown since fallowing, viz. turnips, barley, and clover, will give some idea of the value due for the remaining tillages.

				£	s.	d.
Expense of turnips per acre, as before stated						6
of barley	_	-	-	3	0	6
of clover		-	-	1	19	0
Three years' rent at	31s., a	nd tithes a	t 11s.	6	6	0
Taxes and rates at 6	is. per :	acre -	-	0	18	0
Interest on capital, s	ay two	years', at 1	l0 per			
cent. on 121	-	-	-	2	8	0
				_		
			£.	24	4	0

Produce of Three Years.

				~	٠.	644				
Turnips	-	-	-	4	0	0				
Barley, 5	quarters,	at 28s.	-	7	0	0				
Straw	-	-	-	2	0	0				
Clover, fir	rst crop	-	-	4	10	0				
Ditto, sec	ond crop		-	2	0	0				
				_	_		19	10	0	
							_		_	

This calculation would show that the tillages on a clover field on land of good quality amounts to 41. 14s., whereas, in the valuation of the field No. 7., the profit amounts to 71. 17s., according to the custom of valuing the remaining tillages as a crop. The custom of valuing only ploughing, seed, and sowing on a clover ley, would appear to be fallacious from this statement; but an average may be drawn between the two modes, so as not to press unfairly on either party.

It may be urged, in opposition to this estimate, that if the crops of turnips and clover happen to fail, the difference between the produce and the expenses will equal, and in some instances exceed, the profits when allowed as a crop: this may be the case in some seasons, but on the other hand, it must be observed, that the produce is here moderately stated on land of good quality. The crops of clover are a low average, and barley will often exceed the statement both in quantity and in price; the contingencies of more value of produce must be set against the chances of a failure in the crops; and an average is here attempted to be shown, which might not be so easily understood without a calculation of both methods.

ON WHEAT OR BEAN STUBBLES.

The tillages on land sown with wheat after beans may be found in a similar manner, if done in the regular four years' course of husbandry.

•			£	8.	d.
Expenses of turnips, as before	-	-	9	12	6
of barley -	-	-	3	0	6
of beans, for ploughing	and	sow-			
ing	-	-	0	12	6
seed 3 bushels, at 4s.	-	-	0	12	0
Three years' rent, at 31s	-	-	4	13	0
Tithes 11s., rates 6s. for 3 years	-	-	2	11	0
Reaping beans 9s., threshing 8s.		-	0	17	0
Interest on 121, two years, at 10	per	cent.	2	8	0

Carry forward 24 6 6

ON WHEAT OR BEAN STUBBLES. 171

Brought forward - 24 6 6

Produce of Three Years.

				•••		u
Turnips	-	-	-	4	0	-
Barley	-	-	-	7	0	
Straw	-	-	-	2	0	(
Beans S	O hughale	of 4-			_	

Straw - - - 1 10 0

£3 16 6

X.

DILAPIDATIONS AND MEASUREMENTS.

It is usually expected that on every farm the fences, gates, walls, stiles, and wickets are in good repair, and fit for being used; but if upon inspection any part of them be found deficient, a deduction must be made. equal to the expense necessary to put them into the proper state. The allowance will vary in every different locality, according to the price of labour and the cost of materials. In fencing, a price per yard, from 1d. to 4d., will be given, according to the state of the fence, as it may be seen to require only partial repairs, or a renewing altogether. It is also expected that enclosed farms have a gate and posts properly fixed in each gateway; if they be found wanting or broken down, allowances must be made. The sum of 10s. is frequently allowed for a gate, and 3s. or 4s. for each post. On many estates, the landlord affords the timber for all rough work, and the farmer is at the expense of using it. On wet lands, where the fields require side ditches, the gateways must be provided with bridges, and covered to a level with broken stones, so that the water may pass freely; if any of these be broken down, an allowance must be made.

The houses must also be inspected by proper tradesmen, and a valuation allowed for deficiencies.

IMPROVEMENTS AND REPAIRS.

There is no law for remunerating a tenant for improvements made on the farm, or for any buildings he may erect, these being deemed the property of the landowner, who can give legal notice to quit, and take possession when he pleases. Most of the laws relating to landlord and tenant were enacted in former times, when cultivation and other circumstances were widely different from the present, and when the interests of the former were nearly the whole object of legislation. The proprietors were then as yet the sole legislators, the rest of the community being slaves and serfs, attendants or dependants. No wonder, then, that we find those laws so much on their own side; and though now seldom noticed or appealed to, they still exist.

The following laws, regarding what the tenant is liable to uphold and keep in repair, are extracted from Williams's Farmer's Lawyer, under the article WASTE:—

"Whatever does a lasting damage to the freehold or inheritance is waste: first, in respect of houses; secondly, in respect of gardens, orchards, and the like; thirdly, in respect of land; fourthly, in respect of timber and other trees.

"First, as to houses.—It is clear, from the stat. Marlb., 52 Hen. III. c. 23., and stat. Glo., 6 Ed. I. c. 5., that waste may be

done in houses. Thus, if a tenant pull down the houses demised, it will be waste: so if he suffers a house to be uncovered, whereby the timber decays, though the timber be not thereby thrown down: so if the house was uncovered at the commencement of the lease, yet it will be waste if he pulls it down without the consent of the landlord ; or if it was runious at the commencement, and he suffers it to be more ruinous. So if the tenant suffers glass windows to be broke or carried away, or the wainscot, benches, doors, furnaces, or the like, which are fixed to the house, to be removed, although they were originally fixed by the tenant by nails, screws, or otherwise. It is also waste if he permits the walls of a house to be decayed for want of plastering, whereby the timber is rotted, or the chambers of a house injured, though the timber be not thereby rotted. So if he does not scour a drain, whereby the ground timber is decayed; so it will be waste if the walls

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are suffered to go to decay, though the timber was in decay at the commencement of the lease: and it will be waste, though there be no timber upon the land demised for repairs; or though the house was uncovered by or damaged by tempest, if it be suffered afterwards to remain in decay. So it will be waste if the tenant pulls down the house, and rebuilds it less than before; or if he rebuilds it larger, to the prejudice of the landlord, for it is more charge to repair. So if the tenant alters the house to the landlord's prejudice; as, if he converts 'a parlour into a stable, or changes a corn mill to a cotton or fulling mill, or the like. So it may be waste to turn two rooms into one; for if it would be for the lessor's advantage, it may be shown on the other side. So it will be waste if the tenant builds a new house, and afterwards suffers that to be decayed.

"However, in all questions respecting waste, it is to be observed that, in regard

to the repairs of houses, the tenant is not liable thereto, unless he holds the premises under a lease for a term of years, but the burden thereof lies on the landlord. Thus in the case of a tenancy at will, or from year to year, the landlord is under an obligation to keep the premises in tenantable repair; but where there is an actual lease, the charge of repairing, without any express covenant for that purpose, is upon the tenant, reasonable or ordinary wear and use being allowed.

"But if the house was uncovered at the commencement of the lease, it is no waste if the tenant suffers it to fall into further decay, without pulling it down, or if the walls were uncovered, or insufficiently supported; or if the house was ruinous, and the tenant suffers it to be as it was, without permitting it to become more ruinous. So also it is no waste if the tenant removes furnaces, coppers, or other utensils of trade, though fixed to the freehold, if he removes them before the expiration of his term; but if he permits them to remain after the expiration of the term, he cannot remove them, for they are then vested in the reversioner or landlord. In like manner, green and hot-houses are removable ; so a barn erected on the premises upon blocks of timber; and this notwithstanding there be a covenant to leave all buildings which then were or should be erected on the premises in repair; for such covenant means, that the tenant shall leave all buildings annexed to and become part of the reversionary estate: but if the tenant will actually build, he must leave the buildings for the benefit of the landlord; thus if the tenant erect a beast-house, a carpenter's shop, a cart-house, pump-house, or fold-yard wall letting such buildings into the ground, he cannot remove the same; for there is a distinction between erections necessary to the purposes of trade or manufactures, such as hot-houses, and the like, and those that

are requisite in order to the better enjoyment of the land demised, such as beasthouses and the like; and therefore those of the latter description are not removable by the out-going tenant, but must remain for the benefit of the inheritance.

"Secondly, As to gardens, orchards, and the like. Waste may be committed therein, if the tenant cuts down pear trees, apple trees, or other fruit trees, or, if they are thrown down by tempest, and the tenant afterwards roots them up, or cuts down the germens growing, without planting new. So, if the tenant destroys or suffers the stock of a dovecote, warren, park, fish pond, pool, or the like, to be diminished, or throws down the pales of a park or warren, or stops up the holes of a dovecote, or throws down the banks of a fish pond. But if the tenant kills or destroys, yet it is no waste if he leaves a sufficient stock.

"Thirdly, As to land, it will be waste, if the tenant suffers the sea to surround

arable land, meadow, or pasture, or if he suffers a wall or bank of the sea, a river, or the like, to be ruinous; by which the water surrounds or overflows the land, and renders it useless; so if he digs up the surface of the land, and carries it away, or if the tenant converts arable to wood, or wood land to arable, it will be waste; or meadow to arable or pasture; or meadow to orchard or hop ground (though it be done for the amelioration of the soil); or a hop ground to tillage.

"So if a tenant for life or years opens new mines in land, demised without mention of mines, it will be waste; so if he digs for gravel, lime, clay, brick earth, stone, or the like, in pits not open.

"But it is not waste if land is surrounded or overflowed by the violence of a tempest; or if pasture be converted to tillage for the improvement of the soil, where it has been sometimes pasture and sometimes arable; or if it was stocked with rabbits, it not being a warren by charter or prescription; so, if it was a warren. So it is no waste if the land lies fallow, though it be bad husbandry; or if trenches are dug in a meadow, to draw off the water; or if wood, or the like, be sown against the end of the term, though it be not ripe for several years.

"So it is not waste to dig for ore, coal, or the like, in mines open at the time of the lease; or if mines were not demised, if the land was demised with all mines; neither will it be waste for the rector or vicar to dig for or open mines in his glebe.

"The remedy of the landlord against the tenant for waste, is either under the statute of Gloucester, 6 Ed. I. c. 5., whereby it is enacted, that if tenant for life or years do waste, he shall forfeit the place wasted, and treble damages, or by a special action on the case in nature of waste."

The above extract sufficiently shows the absurdity of our existing laws on the sub-

ject now mentioned, and that they are as inapplicable to our present times as the implements of husbandry in use at that period would be to our improved system in the hands of our most skilful workmen. appears that a tenant at will or from year to year is not liable for repairs, but that the expense rests wholly on the landlord. A house erected by the tenant belongs to the landlord, if it be built on the ground, but if set upon timber blocks, it may be removed, though equally necessary as the other, for the occupation of the farm. Greenhouses and hot-houses are removable, or the tenant will be paid for them; but if he builds a barn or cow-shed, he gets nothing but the temporary use of it, as they are not, and cannot be, set on posts or blocks. misunderstandings that have arisen on these points have been occasioned by the great changes that have taken place since the times when those laws were framed; they are now little regarded, being not only inapplicable, but opposed both to justice and equity.

The contracts now entered into between landlord and tenant may be so managed as to render unnecessary any appeal to such absurd regulations, and it now very seldom happens. The houses erected on the farm are required for the profitable occupation, are built at the expense of the landlord, and are his property as much as the land itself. He lets the use of both houses and lands to the farmer for a yearly remuneration, upon condition of his using them by the rules adopted in good husbandry-the views of the former being directed to his permanent interest, and the latter more to the temporary only. But a natural distinction here obtains between houses and lands; for if a farmer during a lease improve the lands, he will derive a benefit from it; but if the houses be sufficient, he will derive no benefit from an extension of them, and therefore any expenditure on that point is

misapplied. The houses being put into good repair and fit for use, the tenant is expected to keep them in that state, supplying casualties and deficiencies, but not the decays of nature, at least on a large scale. To enable him to uphold all such accidents, material is generally but not always afforded him, as rough timber, lime, stones, bricks, and slates, free of any charge except the carriage. It is proper in every point of view, and ultimately beneficial to both parties, that every building on a farm be erected by the landlord, and the farmer keep them in repair, and these repairs may be easily settled by the farmer and land steward, without having any recourse to law, which ought in every case to be most studiously avoided. If a bar of a gate be broken, the farmer replaces it with another; if a post be worn out, the farmer fixes another; if tiles or slates be blown from a roof, the farmer replaces them; if the door of a house fail or be damaged, the farmer repairs it; and if a beam or a rafter fail, the tenant fixes another, material being afforded him or not as agreement may be made. If the farmer should wish any more buildings, and the landlord or his agent be of opinion that it would be useful for the farm, a special agreement is entered into, the tenant performing all the carriages, and the landlord building for his permanent interest. On large modern erections the farmer often pays a per centage on the money expended. In no case should farmers be allowed to build temporary hovels when a permanent purpose is to be answered, and it is only a waste of money to contribute any portion of the expense. If more buildings be required, let them be planned and arranged according to the most modern improvements, and be erected to benefit the presentpossessors and occupiers and generations after them. Much money has been uselessly squandered by the frittering economy of spending it on many points which show no

proportionate result, when by combining it on one point after another, the benefit of the application would be seen, and appear not only at the present time, but during the currency of leases, with little or no further outlay. Our practice is open to great improvements on these points.

It is usually stipulated in a lease or agreement, that the tenant, on accepting the houses on a farm by taking possession of the land, is bound to leave them in tenantable and suitable repair. It follows from this clause, that if houses be destroyed by fire or any other accident, the tenant would have to rebuild them on getting the materials, as agreed upon for that purpose in the lease: but if not mentioned, at his own cost entirely. This seemingly heavy condition is removed by the act of insurance, on the part of the landlord, or farmer jointly; for if strictly and legally interpreted, the proprietor may or may not insure at his option, and it would in the event of such a

contingency, prove in many cases a ruimous accident to the farmer. Few landowners would be disposed to take advantage of such a clause; and farmers who may be aware of the liability, should bear in mind to stipulate for insurance, or other clause, to obviate the condition.

The fences on a farm are under the same regulations as the houses. They are put into fencible condition, and the farmer covenants to leave them in a similar state. Fences are in most cases very much neglected from want of the enforcement of the stipulations in the lease. It is most certainly necessary that fences, gates, stiles, and bridges be put into proper repair before any tenant can be required to uphold them, and this expense will and must in many cases fall upon the landlord, if he wishes his estate to be profitably managed. The temporary interest of the farmer directs him to pass the time with as little expense as possible, and unless the landowner or his

agent attend closely to the subject, much loss will ensue, which by timely interference might be prevented. It is understood, that a farmer cannot demand a remuneration for any new fences, or walls of any kind he may erect during the time of his occupation -they may suit his convenience, but not the landlord's views, and no man can make a claim on another for the expenses of his own fancy. But upon a mutual understanding and arrangement that the proposed alterations will be beneficial to both parties, the case is wholly different; an agreement is made, and the work is performed at the joint expense of landlord and tenant. In some places, the erection of new fences and the removal of old ones is done at the sole expense of the proprietor, and cleaned, reared, and protected for six or eight years, till it becomes a fence, and is then delivered to the farmer as such, to be by him upheld and kept in fencible condition. In other places the landlord affords the quicksets,

and the tenant does the other work; and also gets plants to fill the gaps in old hedges that have been neglected. But young sets seldom or rather never grow in old foundations, and it may be preferable to fix a paling fence at once, which will last for many years. In all such cases, no farmer can feel so anxious as if he were the proprietor; if his purpose be served, he is satisfied; the principal attention consequently falls on the other party. By almost universal practice, hedges are planted and little more heeded: the fence is thus neglected and becomes a bad one, and forms a never-failing source of disputes and valuations for repairs between the out-going and in-coming tenant. To this cause must be attributed, not only the shameful condition, but the utter ruin of fences all over the kingdom; if the soil and situation be favourable, they grow and become a fence by chance, but they owe very little to the care of any person. In cases of such neglect,

the original outlay is greatly lost, for in a short time another expenditure is required to uphold it, which might have been partly prevented. Boundary fences between farms and estates are generally in the worst condition; it might be attended with benefit to divide them equally between the respective tenants. On these points there is a very wide field for improvements in every part of the kingdom. It must be effected by the landowners.

ON A DECLINE IN THE VALUE OF TILLAGES.

In valuing half tillages, a period of two years has generally elapsed from the time the tillage was applied to the time when the valuation is made; and during that period a difference may have taken place in the value of labour, and of produce. The subject has been often mentioned among valuers, whether the value should be fixed by the present rates, or by those of the time when the expense of the tillage was applied by the quitting tenant. The price of grain is ever fluctuating, and it is impossible to foretell what the future price of such an article may be. Rent and taxes are positive charges, and must be paid whether the price of produce rise or fall.

The manure and labour which have been expended, should be considered in the same light, and valued at what they would cost the farmer at the time of application. The profits which are expected, and which flow from an increase of produce, arising from manuring and cultivating land, are much slower in being realised than from most other of the active businesses of life; two, three, or more years may be allowed for remuneration; for though a single crop occupies the ground only one year, the manure and labour which produces the crop have been applied in most cases a year or two previously. For these reasons it would seem

fair to value the tillages by the rates of the time when they were applied.

But on the other hand, it is urged that any risk incurred by the out-going tenant should not extend to his successor, but be determined by the expiry of the tenancy, and that it would be unfair to make the entering tenant pay for any expensive tillage the other may have applied in the point of manure and labour, which may prove dear beyond the customary rate, and may not have been applied with judgment. it is certainly very improbable that any farmer will speculate on an expensive tillage so near to the termination of his lease, or that the expenses of manures and of labour will vary so much in the course of 11 or 2 years as to make any disputable difference.

It has appeared advisable to value according to the present worth of the thing in question, whether prices have risen or fallen; for the tenant who applied the tillage has had his fair chance of the speculation in the rise or fall; if a rise has happened he will have gained something; if a fall have taken place, he will lose a little, as occurs in almost every transaction of human affairs.

ON MEASURING STACKS.

Hay stacks do not often meet the valuer, either at the Candlemas or Michaelmas entries; in the former case they will be mostly consumed by the 13th of May, and in the latter the out-going tenant is often allowed to sell it, if his successor be not inclined to purchase the whole or any part of it. In all cases, the in-coming tenant should be bound to take hay and straw at a valuation. Hay stacks are built in the form of a parallelogram, or of a cylinder, and are measured in solid yards, and reduced to tons by allowing a certain weight of hay to the cubic yard, according to the time

the stack has been built. When the valuation happens in May, the stack will have stood about 10 months, and about 16 stones or 2 cwt. may be allowed to a solid yard, and consequently 10 yards to a ton. Clover lies lighter than natural hay, and may require, according to dryness when stacked, from 11 to 13 yards to one ton.

If a stack measures 9 yards in length at bottom and 10 yards at the eaves, $3\frac{1}{2}$ yards wide at bottom and $4\frac{1}{2}$ at the eaves, and suppose it to be $4\frac{1}{3}$ yards in height to the eaves, and that the roof rises 2 yards, the contents in tons are found as follows:—

Average length = 9½ yards.

Ditto breadth = 4

Ditto height = 5 including one third of the rise.

One ton=10 yds.) 190

tons = 19 in the stack.

When a stack swells much at the eaves, the

height must be taken in several places, with a perpendicular staff; and other irregularities, if any, must be allowed for accordingly.

When hay is built in round stacks, swelling upwards with a conical top, the circumference must be taken at different places, and a mean girth found, and also the perpendicular height, and the rise or slant height of the top, one third of which is added to the perpendicular height of the stack. Suppose the circumference of a stack at the eaves to be 50 feet, round the middle 46 feet, and round the bottom 36 feet, the perpendicular height to the eaves 13 feet, and the roof rises 9 feet, what are the solid contents in yards and tons, and the value at 31. a ton, allowing 10 yards to a ton?

50 46 36 3)132 44 44 176 176 1936 .07958 15488 9680 17.424 135.52 154.06688 16 = 13 + 3, one third of the rise. 924.40128 1540,6688 10

27) 2465.07008 (91.29889 yards.

216 248 243

243

5.13988, or 9 tons and 1 yard.

27

80

243

251

243

243

1 yard - 20

240

240

240

240

240

240

By the above method, the mean circumference being found, it is squared and multiplied by .07958, because the areas of circles are to each other as the squares of their circumferences, and the area of a circle whose circumference is 1, will be .07958. The strictly correct method of measuring such stacks would be to consider the body of the stack as a cylinder, and find the solid contents by multiplying the square of the diameter by .7854, the area of a circle whose diameter is 1, and because the areas of circles are to each other as the squares of their diameters; and that product multiplied by the height of the stack will give the solidity in yards, or in feet, as the measurement may be taken. The top of the stack is a cone, and is measured by multiplying the square of the diameter by .7854, and that product by one third of the perpendicular height. The common method of adding one third of the height of the top to the height from the ground for the mean

height, will give the contents something below the truth; but the difference is trifling on either side, and the method is sufciently correct for all practical purposes.

The number of yards allowed to weigh one ton must depend on the dry or moist state of the hay when it was stacked, the length of time it has been built, and also on the old or young state of the grass when it was cut. Ten yards for meadow hay and 12 for clover is an average allowance; and in large stacks of one and two years, nine and sometimes eight yards are allowed for one ton. The quality of the hay must be inspected in several places, in order to ascertain the value. If the stack be measured soon after it has been built, as many as 16 yards will be required for a ton.

ON CORN STACKS.

The quantity of corn in a stack may be estimated by judging the condition and breadth of the land it has grown upon, and by the appearance of the stubble, or by measuring the stacks in solid yards, and allowing the average quantity of one bushed to a cubic yard. But if the crop has been mown, one yard will not average more than three pecks. Barley, oats, peas, and beans, if any remain, may be valued in the same manner; but such estimates are liable to much variation, from the length of the straw, the season, and the soundness of the grain. If there be no restrictions for the hay and straw to be consumed on the farm, the out-going tenant often removes them, which renders valuing unnecessary; but such removals ought to be expressly prohibited.

ON STRAW.

In many leases and agreements it is provided that the straw and manure produced by the last year's crop shall be reserved for the landlord or the in-coming tenant, without any remuneration being given for it. But this is not the case in the present instance; the tenant is only required to consume all the straw and to apply all the manure on the farm; and on quitting he is entitled to the value of what he leaves by the custom of the country, or of the estate on which he resides.

When straw lies in a square form, it is measured like hay, by allowing 18 or 20 yards to a ton, as it may lie light or compressed. When tied in bundles, a number of a medium size may be weighed, and by counting the number of bundles, the weight of the whole may be easily obtained. Straw tied up is usually allowed to be worth 10s. a ton more than loose straw; and the straw of barley and oats, if sweet and used for provender, is rated a few shillings a ton higher than loose wheat straw; but if used for litter only, the latter brings most value.

The quantity of straw produced on an acre of land generally weighs twice the weight of the grain crop. If the crop be 3 qrs. of wheat, at 36 st. is 108 st., and twice 108 is 216 st., or 1½ loads of straw to an acre. Exceptions will occur, but the

rule will be found to be very near the truth.

ON THE GARDEN.

Fruit trees are generally valued when not planted more than ten or twelve years; when they have passed that age, they are supposed to have paid cost and expenses, and become the property of the landlord. They cost singly a few shillings, and rise in value till six years old, according to their apparent worth, and the value remains the same during the next six years. Good currant and gooseberry bushes, young and in full bearing, are valued at prime cost, about 3d. each.

The digging of the ground and the vegetables growing in the garden are valued, or the latter are removed. As a garden produces a crop every year, and is always in good cultivation, nothing is allowed for labour previous to the last crop, but halftillage is due upon the manure. If any labour or manure has been applied since the last crop was removed, the quitting tenant is entitled to value for it, and also for any seeds sown. The shrubs, flowers, and vegetables, may be valued or removed.

ON PUMPS AND TROUGHS.

Pumps and troughs are valued or allowed to be removed; they are sometimes the property of the occupier, and often of the proprietor, when no valuation is required. Pumps are estimated at about 10s. a yard in depth, if the length be under 12 yards; at 12s. 6d. if above 12 yards and under 20; and if above 20 yards, 15s. is given, varied in all cases by the current price of lead. The depth is measured by length of pipe, and the pump case is included.

Troughs are valued by the number of gallons they contain, and are usually worth 4d. to 6d. according to quality. The length, breadth, and depth of a trough being multiplied together, will give the contents in cubic inches, which, divided by 282,

the number of cubic inches in a gallon, will give the contents in gallons, and the value may then be found at the rate payable:—
Suppose the inside length of an oblong trough is 56 inches, the width 42 inches, and the depth 32 inches, what are the contents in gallons, and the value at 5d. per gallon?

282)75264(266 gallons, 3 quarts.

gal. qts. 266 3 Round troughs are measured as a cylinder, by multiplying the square of the inside diameter by .7854 for the area of the bottom, and then by the depth for the whole contents, which, divided by 282, will give the number of gallons the trough will contain.

A semicircular trough is the half of a round one of the same depth and diameter, and is measured by calculating by the former rule, and then taking half of the amount for the contents.

Pumps and troughs, and all articles that partake of the nature of a fixture, should belong to the proprietors, and the decays and dilapidations during the currency of the lease be upheld by the tenant, as in other cases of a like nature.

XI.

ON DIFFERENT CUSTOMS OF VALUING TENANT RIGHTS.

The rotations of crops may be so much varied, that it would be useless to attempt showing the manner of valuing to suit every change that may be made.

If a tenant hold a farm by a lease or by a yearly agreement, he is not entitled to any valuation for tillages performed out of the course mentioned in the agreement, and can only demand what the stipulations enjoin. If the four years' course be mentioned, or three crops and a fallow, and not to take two corn crops in succession, or more than two such crops between fallowings, he will not be allowed for tillages on land on which he has deviated from the system to a worse one; but if a more meliorating course be adopted, no objections

can be made, and due remuneration would be given.

The dung in and upon the land, and made from the straw produced on the farm, is understood to belong to the tenant, and is valued to him accordingly. When it belongs to the landlord, the valuation will be so much less. The allowance for tillages varies in different districts, and even on adjoining estates; and a landowner can at any time alter his covenant by giving due notice at the time of a change of tenancy. Some regulations allow the full value of tillage and of manure, but no half tillages in any case; and seed and sowing only for growing crops. This custom prevails on inferior lands, where manure is applied often, and in small quantities. In places where the manure belongs to the landlord, both full and half tillages are allowed for rent, assessments, dressings, and labour of manure, and seed and labour only for wheat sown and growing after beans, and an extra

allowance not exceeding 50s. or 60s. an acre besides seed and labour, for wheat sown and growing, on a clover ley; such allowance to be regulated by the condition of the land, and the likelihood of its bearing a crop. The following valuation is on the most favourable scale ever granted to a quitting tenant, and fully remunerates him for ordinary work and for value left; and it is understood he has made a special agreement for the erection of any buildings and walls, and for making any new fences. The law will not award him compensation for such improvements unless provided for by agreement; and a tenant who makes them, must see how he stands in that respect, if the improvement be of such a nature as not to repay him during his term of holding. But as such uncertainty would operate against the improvement of lands, most landlords are very willing to allow a fair compensation for all alterations that are judiciously and beneficially executed; and it has been

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arranged in some districts, that if the tenant quits before the end of ten years, he will be allowed one tenth of the value for every year of the ten that is unexpired. Tenants cannot be expected to lay out money unless they have a prospect of a return. When due encouragement is held out, they will frequently make many improvements and alterations that will benefit an estate for a long period of time; and in the absence of a lease to enable them to hold for years to secure repayment, it seems very reasonable that such remuneration be granted, when the improvement has been executed under the knowledge that no compensation could be claimed by law or by agreement, but merely from the acknowledged value of the work.

On the other hand, heavy valuations are often very injurious to in-coming tenants, and inconvenient to landlords; they take away much capital from the farmer, and in return he is often induced

to try to raise the amount of appraisement when he quits; and even in the case of the landlord holding a farm for a few years, and if he expends any money on improvements, a part at least of the expenditure will fall on the valuation, and raise it accordingly. For these and similar reasons, leases and agreements are now very explicitly worded on these points, that the tenant may understand what he has to expect; the tillages are mentioned which he has to pay on entering, and the same will be allowed him on leaving, unless they be altered by mutual consent: and as neither law nor the custom of the country will support him in claiming tillages for work done out of the ordinary course of cultivation, he must look to his agreement with the landlord for that part of the expenditure he may think will not be repaid him from the returns of produce before the term of quitting.

Land is frequently held without any

lease or even agreement betwixt the parties except for the payment of rent, in which case, though the tenant may crop the land as he thinks proper, and follow no regular rotation, it is still understood that he cultivates the land by the best rules of husbandry in the district, and the custom of the country will give him a suitable valuation.

The following specimen of a valuation of tenant right is given to show the allowances and covenants mentioned in this work. It is drawn for a Candlemas entry to the lands, and at 13th of May to the houses, and awards the crops to the in-coming tenant at valuation.

The rent of the farm and buildings was shown to be 2684. 5s.: the poor's rate and other assessments are calculated on the net annual value, which is the rack rent, minus the cost of repairs, for which 10 per cent. is here given as a full allowance:—

Valuation of tillages and manure on farm, 2d Feb. 1839.

			£	s.	. d.
Rent of farm and buildings	-	-	268	5	0
Poors' rate, at 3s. per pound, on	2501.	-	37	10	0
Highway rate, at 1s. 6d., on do.	-		18	15	0
Church rate, at 6d., on do.	-	-	6	5	0
Divided by 242 acres in farm	-	d	330	15	0
Rent and taxes per acre -	-		£1	7	0

A. R			£	8.	d.	£	8,	d.
14 9	0				i			
		(See Plan.)						
		Ploughing for fallow, at 10s. per			- 1			
		nere,		7				
		Stubbing, fencing, and gripping.	0	15	0	8	2	6
14 9	8 0						-	
		Not ploughed.						
14 5		No. 3.—For fallow.						
		Not ploughed.						
14 9	3 0	No. 4 Grass mown last						
		season, and manured pre-						
		viously.						
		120 loads of manure, at 8s., in-						
		eluding earrying and spreading, half tillage,			-	24	0	0
		nan tanage, -						
		No. 5.—Pasture.			1			
14 5	3 0	No. 6.—Turnips, ten acres	_					
		eaten on the ground by						
		sheep.						
		Rent and taxes, at]						
		14. 7s., per acre.						
		Five dressings, at £4 8 S 12s. 3d., 3l. 1s. 3d.	44	2	6			
		SO quarters of rape-dust, at 20s.,	30	0	0			
		Carriage, 10 miles, at 11d. a quar- ter per mile,		17	6			
		Spreading ditto, at 4d. per quar-						
		ter,		10	0			
		30 chaldrons of lime, at 9s	13	10	0			
		Carrying 12 miles, at 9d. per						
		mile,		10	0			
		Spreading 30 chaldrons, at		-				
		1s. 6d., Turnip seed and hoeing,		5 10	0			
		Turnip seed and hoeing,	-	_				
		Deduct one half the value of the	110	5	0			
		turnips, at 4l. per acre,		0	0	90	5	0
		Corre forward -	-		_	199	7	6

Δ. 1	ı.	P.	,	£	*	d	£		d.
	-		Brought forward	-	-	-	122	7	6
		1	No. 6 Turnips drawn -						
			. 4 acres, 3 roods.						
		1	Five dressings at 12s. 3d.,						
			3l. 1s. 3d. per acre,	14	10	11			
			No rent and taxes allowed. Half of 60 loads of dung, at 10s.,						
		1	including carrying and spread-						
			ing,	15	0	0	1		
				_	-	_	29	10	11
14	S	0	No. 7 Clover ley wheat.						
			The crop is valued to yield 30				1		
			bushels, at 6s. 6d.,	9	15	0			
			Deduct rent and taxes, £1 7 0 Tithe 1 1 0						
				2	8	0			
				-	_	_	-		
			Per acre,	7	7	0	108	8	6
14	9	0	No. 8 Grass.				1		
• •			120 loads of manure, at 8s., -	١.			48	0	0
							1	-	-
14	S	0	No 9.—Grass.—Pasture				١.		
14	S	0	No. 10. — Young Clover.				1		
• •			Half rent and taxes, £0 16 0				1		
			Two dressings, at						
			12s. Sd., 1 4 6						
			£2 0 6	29	17	0	1		
			Half of 150 loads of dung, at 10s.	37	10		1		
			150 lbs. of red clover seed, at 6d.		15				
			10 bushels of ray grass, at 4s., - Sowing and harrowing, -		15				
				_	10		73	16	6
14	3	0	No. 11. — Wheat Stubble						
			for Beans.						
			Half rent and taxes, at				-		
			Two dressings, at 12s. 3d. 1 4 6						
							1		
			£1 18 0	28	0	6			
			Carry forward,	28	0	6	332	S	5
			P 3		-		,_,		

Α. 1	. r		£	£.	d.	£	ž.	d.
		Brought forward,	28	0	6	382	S	5
		Half of 75 loads of dung, at 10s., One third of 20 quarters of rape-	18	15	o			
		dust, at 20s., Half of 50 chaldrons of lime, in-	6	13	4			
		cluding earrying and spreading, at 20s. 6d., -	25	12	6			
14 8	3 (No. 12 Clover Ley, in-				79	1	4
		tended for Oats. If sown with wheat, it might						
		produce 20 bushels, at 6s. 6d. Deduct rent and taxes, £1 7 0	6	10	0			
		Do. tithe, 0 14 0 Do. ploughing, seed,						
		and sowing, 1 17 6	4	3	6			
			2	6	6	34	5	10
14 8	3 (No. 13. — Wheat after Beans.						
		The crop is valued to yield 20 bushels, at 6s. 6d.		10				
		Deduct rent and taxes, £1 7 0 Do. tithe 0 14 0		-10	U			
		Do. titile, 0 14 0	2	10	0			
		Per aere,	4	9	0	65	12	9
14 8	3 (No. 14. — Summer Fallow Wheat.						
		Rent and taxes, - £1 7 0 Five dressings, at 12s. 3d., 3 1 3						
		Per acre, - 4 8 3	65	1	8			
		180 yards of dung, bought at 4s., Carrying and spreading, at 6d., -	4	10	0			
		90 loads of burnt earth, at 1s. 6d., 45 bushels of wheat, for seed, at		15				
		6s. 6d.,	14	12	6	126	19	2
		Carry forward	-			688	2	6

Brought forward,									
4 3 ONO. 15.— Summer Fallow Rent and taxes, £1 7 0 Five dreadings, at 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	A.	R. P		£	5.	d.	£	g. 9	
Wheat Rent and taxes £1 7 0			Brought forward,			-	600	-	U
Wheat, Rent and taxes, = £1 7 0	14	3 (No. 15 - Summer Fallow						
Rent and taxes. \$\int 1\ 7\ 0\$ Five dressings, at \$\frac{1}{12a}\$, \$\frac{3}{a}\$, \$\frac{1}{3}\$,									
Five dressings, at 122, 364, - 3 1 8 150 loads of dings, at 100, - 75 0 0 150 loads of dings, at 100, - 75 0 0 0 42 bushels of seed wheat, at 6x. 6d. 13 13 0 150 loads of dings, at 10x, - 75 0 0 0 153 14 8 14 150 loads of dings, at 10x, - 10x									
12a. 3d., - 3 1 5 Per sere, - 4 8 5 65 1 8 150 loads of diang at 10x, - 75 0 0 42 bushels of seed wheat, at 6x. 6d. 13 13 0 153 14 8 3 NO. 16. — Young Clover Seeds. Ten acros Seeds. Ten acros Seeds. Ten acros Seeds. 15a. 3d. 15a.									
150 loads of dung, at 10s., 75 0 0									
150 loads of dung, at 10s., 75 0 0							V.		
42 bushels of seed wheat, at 6x. 6d. 13 13 0 43 0 No. 16. — Young Clover Ten acres of the field, when curvips we the stein on the ground by skeep. Half rest and taxes, -20 13 6 Two dressings, at 1 4 6 20 118 0 19 0 0 00 en third of 26 quarters of rapedust, at 200. Half of 36 chaltens of lime. Is 13 4 Half of 36 chaltens of lime. Is 13 4 Half of 36 chaltens of lime. Is 13 4 Half of 36 chaltens of lime. Is 13 4 100 pounds of white clover seed, at 20 30 pounds of refell, at 4d. 0 30 pounds of trefell, at 4d. 0 30 young Clover seeds in No. 16. — 4 acres, 3 roods. Two dressings, at 12 20 30 young Clover seeds in No. 16. — 4 acres, 3 roods. Two dressings at 12 20 30 young Clover seeds in No. No rest and taxes allowed, on account of the turrips being drawn. One fourth of 70 loads of dung, at 100.			Per acre, - £4 8 3	65	1	8			
14 3 ONo. 16. — Young Clover Seeds. Ten across of this field, when ground by shoep. Half revet and taxes, -20 13 6 Two dressings, at 14 6 One third of 55 quarters of rape-lines, at 26 4.5, -1 18 0 One third of 55 quarters of rape-lines, at 26 4.5, -1 18 0 One third of 55 quarters of rape-lines, at 26 4.5, -1 18 0 One of third of 55 quarters of rape-lines, at 50 6.6, -1 18 0 Openands of white clover seed, at 50 pounds of white clover seed, at 6.6 40 pounds of the clover seed, at 6.6 50 pounds of trebil, at 4.6, -1 15 0 Young Clover seeds in No. 16, -4 across, 3 roods, it 12. 5.6, it 1.6 to 6.6 per acros, one coount of the turnips being drawn. One fourth of 70 loads of dung, at 100, -1 815 0			150 loads of dung, at 10s.,	13	19	0			
Seeds. Ten acres of this field, when turnips were eaten on the Half rett and taxes, -20 15 6 Two dressings, at 12a, 3d, - 1 4 6 10 0 0			42 business of seed wheat, at or. ou.			_	153	14	8
Seeds. Ten acres of this field, when turnips were eaten on the Half rett and taxes, -20 15 6 Two dressings, at 12a, 3d, - 1 4 6 10 0 0	14	3	No. 16 Young Clover						
Ten acros of this field, when turning were eaten on the ground by skeep. Half rest and taxes, _20 15 6 Test and _20									
turnips were eaten on the ground by sheep. Half rest and taxes, ±20 13 6 Two dressings, at 1 4 6 218. 36., 1 4 6 218. 30. 31 18 0 19 0 0 One third of 26 quarters of rape- dust, at 20c. 5 118 0 19 0 0 One third of 26 quarters of rape- dust, at 20c. 5 118 0 19 0 0 One third of 26 quarters of rape- dust, at 20c. 5 118 0 19 0 0 One to third of 26 quarters of rape- dust, at 20c. 1 18 1 18 1 18 1 18 It duffing enrying and spreading, at 20c. 6 2. 1 18 1 18 9 It op pounds of white clover seed, at 2 10 0 So pounds of red- of op counts of red- o									
Half rent and taxes, -20 13 6 Two dressings, at 122, 34, -1 4 6 2 21 18 0 19 0 0 One third of 26 quarters of repedust, at 202, -1 Half of 36 chaldrons of lime, in 13 4 Half of 36 chaldrons of lime, in 14 4 100 pounds of white clover seed, at 20, -2 20 pounds of red-li, at 4d, -0 13 4 Sowing, -1 12 24, in 15 16 4 No rent and taxes allowed, on account of the turnips being drawn. One fourth of 70 loads of dung, at 10, -2 10 0									
Tro dressings, st 122. 364, - 1 4 6 One third of 26 quarters of rape- dust, at 20th, through of 1 19 0 0 One third of 26 quarters of rape- dust, at 20th, through of 1 19 19 0 Ital of 30 control of 1 19 19 19 Ital of 30 control of 1 19 19 19 Ital of 30 control of 1 19 19 19 Ital of 30 control of 1 19 19 19 19 19 19 19 19 19 19 19 19 1			ground by sheep.						
12a. 3d., 14 6 Oee third of 96 quarters of repedusts, 12 On. Half of 36 chaldross of lines. Including carrying and steading, 17 18 9 Opposed with clover seed, 18 00 pounds of red clover seeds in No. 16. — 4 acres, 3 roods. Young Clover seeds in No. 16 00 pounds of red clover, 18 16 16 16 16 16 16 16 16 16 16 16 16 16									
### 200									
One third of 26 quarters of rupedust, at 20c			123, 36,, 7 - 7 7 0						
dust, at 20th. Half of 35 chaldrons of lines including carrying and spreading. 20 50th of white clover scotl. (5) pounds of red clover scotl. (6) pounds of red clover scotl. (6) pounds of red clover scotl. (7) pounds of red clover scotl. (8) pounds of red clover scotl. (9) pounds of red clover scotl. (1) pounds of red clover scotl. (2) pounds of red clover scotl. (3) pounds of red clover scotl. (4) pounds of red clover scotl. (5) pounds of red clover scotl. (6) pounds of red clover scotl. (6) pounds of red clover scotl. (6) pounds of red clover scotl. (7) pounds of red clover scotl. (8) pounds of red clover scotl. (9) pounds of red c	į .				0	0			
Half of 36 chaldrons of lines including carrying and spending, at 50th 6d., 1000 challenges of the following spending at 50th 6d., 20 challenges of the following spending at 50 challenges of the following spending spend							1		
cluding currying and spreading, at 50x. 6d., - 17 18 9 100 pounds of white clover seed, at 6d., - 20 10 0 00 clumb of red clover seed, at 6d., - 0 13 4 50 ving 4d., - 0 10 0 50 10 5 16 4 acres, 3 roods, - 16 4 acres, 3 roods, - 17 4 acres, 3 roods, - 18 4 acres, 3 roods, - 18 4 acres, 3 roods, - 18 4 acres, - 18 4			dust, at 20s.,		13	4			
at 90s. 6d., 17 18 9 [100] pounds of white clover seed. 20 pounds of receiver seed. at 6d. 1 5 0 [20] pounds of trebil, at 4d. 1 1 5 0 [20] Young Clover seeds in No. 164 acres, 3 roods. Two dressings, at 12s. 3d., is 114. 4s. 6d. per serv, 100 cocount of the turnips being drawn. Due fourth of 70 loads of dung. at 10s. 5 15 0	1		Half of 35 chaldrons of lime, in-						
100 pounds of white clover seed, at 26, 20 pounds of red clover seed, at 3 1 5 0, 20 pounds of red clover seed, at 1 5 0, 20 pounds of trebil, at 4d., 0 13 4 sowing. 10 10 0 50 10 5 Young Clover seeds in No. 16, —4 acres, 3 roods. Two dressings, at 12s. 2d., is 10 to 1			at 90s fel		18	9			
50 pounds of red clover seed, at 5 0	1		100 pounds of white clover seed,			-			
6d. 1 5 0 10 1 5 0 10 1 4 0 10 1 4 0 10 1 4 0 10 1 4 0 10 1 4 0 10 1 4 0 10 1 4 0 10 1 4 0 10 1 4 0 10 1 4 0 10 1 4 0 10 1 4 0 10 1 4 0 10 1 4 0 10 1 4 0 1 1 4 0 1 1 4 0 1 1 4 0 1 1 4 0 1 1 1 4 0 1 1 1 1	1		at 6d.,		10	0			
40 pounds of trebil, at 4d., 0 13 4 50 voing 0 10 0 5 10 0 5 164 acres, 8 roods. Two dressings, at 12s. 3d., is 11. 4s. 6d. per acre., - 10 roet and taxes allowed, on account of the turnips being drawn. One fourth of 70 loads of dung, at 10s., 8 15 0	1								
Sowing 0 10 0 5 10 5 Young Clover seeds in No. 16. — 4 acres, 3 roods. Two Ld. Golden 12 12 12 13 1 1 1 1 1 1 1 1 1 1 1 1 1 1									
Young Clover seeds in No. 16. — 4 acres, 3 roods. Two dresings, at 12 s. 3d. is 11. 4s. 6d. per acre. No rest and taxes allowed, on account of the turnips being drawn. One fourth of 70 loads of dung, at 10s., 8 15 0									
16.—4 acres, 3 roods. Two dresings, at 12s. 3ds, is 11. 4s. 6d per acre, No rent and taxes allowed, on account of the turnips being drawn. One fourth of 70 loads of dung, at 10s., 8 15 0			sowing,	-	10	_	50	10	5
16.—4 acres, 3 roods. Two dresings, at 12s. 3ds, is 11. 4s. 6d per acre, No rent and taxes allowed, on account of the turnips being drawn. One fourth of 70 loads of dung, at 10s., 8 15 0			Young Clover seeds in No.						
Two dressings, at 12s. 2d., is 11.4s. 6d. per acre. No rent and taxes allowed, on account of the turnisp being drawn. One fourth of 70 loads of dung, at 10s., 8 15 0			16.—4 acres, 3 roods.						
11. 4a. 6d. per acre, 5 16 4 No rent and taxes allowed, on account of the turnips being drawn. One fourth of 70 loads of dung, at 10c., 8 15 0			Two dressings, at 12s. 3d., is						
account of the turnips being drawn. One fourth of 70 loads of dung, at 10s.,			12. 4s. 6d. per acre	5	16	4			
drawn. One fourth of 70 loads of dung, at 10s., 8 15 0			No rent and taxes allowed, on						
One fourth of 70 loads of dung, at 10s., 8 15 0									
at 10s., 8 15 0	1 -								
	1			8	15	0			
Carry forward, 14 11 4 892 7				-	_	_	-	_	
			Carry forward,	14	11	4	892	7	~
							1		

۸.	R.	P,	1		-												1 £		
			П			Bro	ug	ht f	orw	are	l, -		-	14	11	4	892	7	7
			48	3	pot	ınds	of	w	nite	cl	over	s	eed.				1		
				at	66	L,		-			-		-	1	4				
			24	F	ou	nds	of:	red	clo	ver.	, at	6d.	.,-	0	12	- 0	1		
		•	20) F	ou	nds	of:	trefi	oil,	at ·	4d.,		-	ő	6	8			
			S)W	ing	and	l h	arro	wi	ıg,	-		-	0	4	9			
														_			16	18	9
							n	rain									909		_
							D	ram	ung	-							909	6	4
			91			ds o	e.	drai	nin			Ν'n							
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				ti	ng,	sett	ing	, ar	id f	illi	ng,		-	1	2	2	1		
						ds i											1		
						, thi		fee	t de	ep,	at 1	s.	6d.				i		
			Н	pe	rı	ood,		-			-		-	1	2	6			
														_	_		2	4	8
																	-		-
																	911		0

Valuation on Premises, on 13th of May.

At this period it is customary to value the manure recently made on the premises, if it belongs to the tenant,—straw, hay, corn, in or out of stack (if any), pumps, troughs, posts, rails, fixtures, and whatever belongs to the tenant, which his successor is willing to take at valuation.

The tenure of the land being understood to expire on the 2d of February, and of the buildings, and homestead on 13th May, a time is thus allowed to the out-going tenant to thresh and dispose of the crop, and to convert hay and straw into manure. But if any portion of the above-mentioned articles remain on the farm, they are submitted to a fair valuation by the decision of the persons who valued the tillages on the 2d of February.

218 VALUATION ON PREMISES IN MAY.

Valuation of articles on Farm, on 13th of May.

			£	ε.	d.
Manure, 350 yards at 4s		-	70	0	0
Ditto, 240, ditto at 3s	-	-	36	0	0
Ashes, 4 loads, at 1s. 6d	-	-	0	6	0
Straw, 6 tons, not bound, at 21s.	-	-	6	6	0
Ditto, 51 bound in bats, at 21s.	-	-	8	10	6
Four stands for stacks, each 20 y		ng,			
at 2s. 6d		-	10	0	0
Garden, 54 gooseberry and curra	nt bus	hes.			
at 4d		-	0	18	0
Half tillage for 8 loads of manure					0
Pump, 9 yards, at 10s	-			10	-
Stone trough, 140 gallons, at 3d.				18	
					_
Ditto, 115 ditto, at 6d.	-	-	2	1	6
		-	_		_
		£1	44	6	4

Valuation of Tillages on thin Soils.

It is now proposed to give a valuation on a thin soil, where both from the climate and quality of the land, the rotations of crops differ much from those already noticed, and therefore require a different method of valuing the tillages.

Leases are sometimes granted on such lands for 14 and 21 years, which period is reckoned sufficient to repay any expenditure the farmer may make in improving the land. Under this circumstance, the tenant is bound to a regular payment of rent, and to a provision that one half or one third of the farm be left in grass, laid down for three years, after fallowing and manuring.

On these thin soils and high latitudes, the rotations of crops are not so regular as on lowlands; but of late years steadier courses have been adopted, extending to 5 and 6, and even to 8 years:—1st, fallow or turnips; 2d, wheat, barley, or oats; 3d, hay, and immediately manured; 4th, pasture; 5th, wheat; and 6th, oats. In this rotation, line would be applied for turnips, and the manure laid upon the hay sward justifies the taking of two corn crops in succession. In cold climates, oats follow turnips; after which the land remains for three years in grass, and then a crop of oats is taken before fallowing again.

Paring and burning and cropping the land with turnips and rape, is a common practice followed for bringing into quick cultivation any rough lands that have lain long in grass, and where the tough sward would require a long time for decomposition. Wheat or oats follow the turnips, and then oats again, then turnips followed by wheat, and then clovers mown, and lastly wheat. In next course, grass seeds take the place of the clovers, and remain for two years, one year mown and the second in pasture. Such rotations are contrary to

the established rule of two corn crops not being allowed to follow each other, that only two white crops be taken between fallowings, and that on lands producing turnips, green and grain crops be sown alternately. In conformity with this just and established rule, rotations may be found for any number of years, both to reimburse the farmer and preserve the condition of the land: - 1st year, turnips after paring and burning or fallowing; 2d, wheat or oats; 3d, clover mown; 4th, pastured; 5th, oats, and may be continued to 8 years; 6th, fallow; 7th, wheat or oats; 8th, grass, for two or more years, or the 6th year may be in grass, and the 7th oats, and 8th fallow; and a crop of tares may be advantageously thrown in and make an alteration. The prospect of the most profitable return, the kind of produce most in demand, and best suited to the soil and climate, will each have due influence in determining the course of crops; and as the farmer knows that profits

can only be derived from seed and labour judiciously expended, he will have sufficient inducement to good cultivation, and to follow a course of husbandry best suited for that purpose. Restrictive clauses are only required to guard against deterioration towards the close of the lease, and though a multitude of such enactments are very objectionable, yet they cannot be safely dispensed with. It is often provided, that one third and sometimes one half of the land be kept in grass, laid down after a fallow crop with a due quantity of tillage, and manure. Two corn crops in succession should be expressly prohibited, and some few such restrictions will always be necessary according to circumstances, a knowledge of which will be best attained from experience and attention to the business as a profession.

Valuation of Tillages and Manure on a Farm of thin Soil, and in a high latitude, 29th Sept.

The farm is tithe free and consists of-

A. R. P. Near Common Field, 4 3 0 Fallow. Middle Do. 5 2 10 Oat-stubble seeds. Far Do. 4 2 12 Seeds 2d year. Near Bent 3 3 0 Clover ley wheat, Far Do. 4 2 0 For fallow. Hollin Field 4 3 0 Turnips. Near Bush Field 5 1-10 Seeds 2d year. Far Do. 6 2 8 Pasture. Dike Field 4 3 10 Oats after wheat. 44 2 10

Rent and taxes per acre.

Rent - 50 0 0

Assessments, 3s. in the pound on 45l. - 615 0

£56 15 0

Divided by 44 a. 2 r. 10 p. gives 1l. 5s. 6d. rent and taxes per acre.

The fences are not included in the measurement,

۸.		P.		£	s.	d.	£	s.	d.
4	S	0				-			
			Fallowed.			- 1			
			4 Dressings, at 13s £2 12 0 Rent and taxes 1 5 6			- }			
			Rent and taxes,			- 1			
			Per acre, £3 17 6			1			
			16 Chaldrons of lime, at 13s. 6d.	10	16	0			
			Carrying 12 miles, at 1s. per chaldron, per mile,	9	19	0			
			chattion, per mite,			_	38	16	1
5	2	10	Middle Common Field.						
			Seeds half-tillage.						
			2 Dressings, at 13s £1 6 0						
			Half of rent and taxes, 0 12 9						
			unch						
			£1 18 9			6			
			Half of 50 loads of dung at 10s.	12	0	0			
			2 qrs. of hay-seeds, at 30s 40 lhs. of clover-seeds, at 6d		0	0			
			Sowing and harrowing,	0	10	0			
				-	_	_	27	15	6
4	2	15	Far Common Field. Grass						
			Seeds, mown. No valuation.						
			No valuation.						
3	S		Near Bent. Clover ley, to						
			sow with Oats.						
			Allowance for tillages, at 50s. per	i					
			acre,	-		-	9	7	6
4	. 0		Far Bent. For Fallow.						
1	2		ra bone Por Panow.						
4	3		Hollin Field. Turnips rid-						
			ded, pared, and burned.						
			Rent and taxes, at 1L 5s. 6d. per						
			nere,		1	1			
			Ridding, at 7L per acre, and par- ing and hurning, at 1L 4s.		19	0			
			Ploughing and sowing turnips, at						
			16s. per acre,	S	16	0			
			Turnip-seed, 10 lhs. at 9d.		7	6			
			Hoeing, 10s. per acre, One half value of crop, at 80s						
			Car and the car and the car	-		_	61	1	1
			Carry forward,			_	137	0	2

1	۸.	R.	P.						£		. d	. 1		s.	d.
1				Broug	ght for	ware	1 -	-	1			15	7	0	2
1	5	1			mown		88-86		1 -						
1			50 Lo	ads of :	rotten o	dung e. h	z, at alf-til	los.	25	5 (0				
			at 1	L 5s. 6	id.	-	-			11	9				
	6	2	8 Far I No va	Bush. luation	Gras	8.	Past	ure				3	4	11	3
4	ŧ	3 1	Dike	afte	r Wh	eat.	-stu								
			One l	alf of	riddin	g, a	t 87.	per		5	0				
			Drain	ing, in ls, 3 fe	Dik	e I	ield,	45	:						
			per	rood;	done th	ree	years		2	7	S	1.			
			The	corn	and st	raw	to !	be'				2	1]	2	S
5		2 1	Midd	-	ommo Oats.		Fi	eld.							ĺ
			32 Qrs 8 Tons	of oat of stra	s, at 20 w, at 2	Os.	-	-	32 8	0	0				
			Dedue	thresh	ing, &	at at	2s. 6	id	40 4	0	0	36		0	
4		2 (90 Bus	Bent. hels of of stray	wheat.	at 6	is. 6d	ole.		5 10	0	30		U	
			Deduct	threshi	ing, &e	. at	8d.	-	36 3	15	0				
4		3 10	25 Qrs.	Field.	, at 12.		tubl	le.	25	0	0	33	1.	5	0
			o rons	of straw	r, at 20	18.	-	-	6	0	0				
			Deduct	threshi	ing, &e	. at	2s. 6	d.	31 3	0 2	6	27	17		,
				Carry fo	orward			-				290	16	- 5	-
						0						-	- 0	-	- 1

A. B. P.		£	s.	d,		8.	d,
	Brought forward				290	16	2
	12 Tons of hay, at 70s	42		0			
	6 Tons of clover, at 60s	18		0			
	Manure, 30 yards, at 4s		0				
	Ditto, 40 yards, at 3s. 6d			0			
	Ditto, 30 yards, at 3s	4	10	0			
	Ashes, 4 loads, at 1s. 6d		6				
	Garden, 25 fruit bushes, at 4d	0	8	4			
	Ditto. 4 loads of dung, at 4s.						
	half-tillage		16	0			
	Stone trough, 110 gallons, at 5d.			10			
	Ditto, 72 ditto, at 6d.	1	16				
	Pump, 14 yards deep, at 12s. 6d.		15		1		
	Ladder, 21 steps, at 7d	0	12				
	Ditto, 30 ditto, at 8d	1	0	0			
		-	_	-	93	9	5
	Dilapidations :						
	3 Gates wanting at 8s. £1 4 C						
	5 Posts, at 2s. 6d 0 12 6						
	50 Yards of fencing at						
	4d 0 16 8	3					
	On roofs of houses - 0 17 6				1		
	On dwelling house - 1 4 C)					
		-			4	14	8
					-		
					6389	0	. 5

Here both tillages and crop being valued, raise the amount to a large sum, and more than most persons would be willing to advance on so small a farm. The crop is usually threshed by the out-going tenant, and the straw valued to his successor at a customary rate, so that the amount of valuation would be reduced by one third. This is the most correct way of obtaining the

just value of the corn, but it is very desirable for one tenant to quit land and houses when the other enters; and the former method is on that account more eligible where it can be followed.

In the southern parts of the kingdom, most farms possess a portion of woodlands, a part of which are cut periodically for hop poles, faggots for fuel and for burning lime, for fencing, and for the use of coopers and cloggers, and for other purposes, as the demand and locality may direct. The average time of cutting may be stated at from eight to twelve years, and the value from 6l, to 14l.: in some instances the price is much higher, according to the quantity and the local value of the materials grown on an acre. These woods are cut in winter and cleared by May, that damage may not happen to the tender shoots. Young plants that grow with a stem directly from the ground are called "maiden trees," and are in all cases the property of the landlord, and are never cut without leave, but grow for timber; and in some places the landlord pays a trifle, 1/d. or 1d. per "teller," as they are often called, for as many young plants as may be thought fit to keep for growing timber, and which grow on a stock or stool, and are farmer's property. In other cases, a clause in the lease gives power to the landlord to reserve without any remuneration a number of young plants, not exceeding 30 on an acre, and sometimes no number is mentioned. This system of mixing timber trees and underwoods is very injudicious and hurtful; but the custom has once got hold, and must remain, like other customs, till another banish it by slow degrees. The trees cover a large space, and hurt or kill the wood below, and they spread into a large circumference of branches without a trunk or bole of length and value. The one object defeats the other: the two purposes should be separately effected, a few outside trees being always left when cutting woods, in order to keep up the view of the scenery.

Trees called "pollards" are found in many places in considerable quantities, in hedge rows, and even in woods, cut over, some 6, 8, or 10 feet high, and consequently produce a number of sapling shoots like a stool cut near the ground. The stocks or stems are the landlord's property, and the tops, often called "frith," belong to the farmer, and are cut periodically as the underwoods. The cuttings of these woods are found to be a valuable appendage to lands on account of the scarcity of other fuel, and in many cases add much to the eligibility of the farm. Proprietors are now getting more inclined to keep the entire management of the woodlands, cutting a portion yearly for sale and accommodation for fuel, and pollards are now being cut down in many places. This plan lessens the amount of valuation.

The growth of these woods since last

cutting, and which is standing at the time the tenant quits a farm, is his property: he has paid rent and taxes for the land, and has got no return, and consequently must be paid for it. The value differs greatly, from the quality of soil and the amount of produce, from 7s. to 20s. an acre for a year's growth on woodlands, and a corresponding value will be given for pollard tops by the growth since last cutting. Considerable quantities of shoots on old stools are often found in hedge rows, which will also be looked at and valued. Where the fences are much neglected and out of repair, such growth is often given for repairing them, according to the judgment of the valuers, who are usually persons living in the neighbourhood, and well acquainted from long practice with the customs of the place, and what constitutes a fair value.

Leys of more than two years old and out of a regular course of cropping will sometimes be found, and when not ploughed and

sown by the out-going tenant, a value is given, which is evidently the difference between the estimated value of the produce, minus the rent and taxes, tithes, and expenses. This custom is limited in prevalence, and is objected to on the grounds, that the land should have been regularly cropped, and that if the out-going tenant chose to follow an irregular system, another should not be made to pay for it. But, on the other hand, the in-comer may plough and derive the profit, and accordingly as high as 3l. an acre has been given; and the allowance may vary fron 10s. an acre to that sum, according to quality. Strict calculations are seldom entered into except on very good lands, but some allowance per acre is usually given by the discretion of the valuers. Very inferior levs used as sheep walks claim no value.

Hop grounds recently manured are subject to valuation for half tillage after one crop has been got, but it rarely happens that manure will be applied so near the close of a lease. Hop poles are also valued according to age, a corresponding deduction being made from the price when new, usually from 10s. to 14s., one new pole being added yearly to a pit, so that one third or one fourth of the number will be new, according as three or four poles are allowed to a hop hill.

It would be unnecessary to multiply specimens of valuations, as the explanations of the principles that have been made, and the examples given, will enable any person to understand the making out of valuations to suit any locality, which are always directed by the customs and usages of the district, and often of the particular estate where the farm is situated. On some estates no half tillages are allowed, and hay must be taken by the in-coming tenant at a feeding price, usually from 2l. to 3l. per ton; in other places hay may be removed, and dung and straw are valued, and in

some cases both the last articles are free. These and other similar alterations will much vary the amount of valuations; the respective allowances in different districts will be added to or deducted from the forms now given, according to practice and usage, but the general principles are not affected, and may be applied accordingly.

XII.

REMARKS ON TITHE RENT-CHARGE APPORTIONMENTS.

As the Tithe Commutation Act, which was passed in the year 1836*, will for the future materially affect the agricultural system of the country, it is presumed that a few remarks on that important measure will not be inappropriate, as an addition to the preceding pages, which treat practically of agriculture.

By relieving the landholder from the

^{*} The several acts for the commutation of tithes race, 1st, "An Act for the Commutation of Tithes in England and Wales," 6 & 7 Will. 4. c. 71. (1836). 2d, "An Act to amend an Act for the Commutation of Tithes in England and Wales," 1 Vict. c. 69. (1837). 3d, "An Act to facilitate the Merger of Tithes in England and Wales," 1 Vict. and Act to explain and amend the Acts for the Commutation of Tithes in England and Wales," 2 & 3 Vict. c. 62. (1839).

obligation to render in the shape of tithes a portion of the produce of the soil, increasing with the amount of capital employed its cultivation, the Tithe Commutation Act has a direct tendency to develope the agricultural resources of the kingdom.

At the present moment, indeed, the country is only in a state of transition from the old to the new system; but in the course of a very few years we may expect to find tithes every where commuted.

In the meantime practical information on the subject is wanting; for numerous as are the works which have been written with the design of showing how the tithe act is to be carried into execution, none, except incidentally, has attempted to explain the ulterior effects of its enactments.

The intention of these remarks is accordingly to present an outline of the leading consequences resulting from the Tithe Commutation Act, limiting the view to such

as are more immediately connected with tithe rent-charge apportionments.

The main principle of the act is to abolish the render of tithes in kind, and to impose upon the lands which produced them rent-charges varying yearly in amount, according to the average price of corn, during seven years immediately preceding each Christmas.*

For this purpose, two thirds in value of the owners of tithes and titheable lands, in every parish throughout England and

* Every rent-charge at the time of commutation is supposed to be of the value of such quantities of wheat, barley, and oats, as the same would purchase, in case one third part thereof were laid out in wheat, at 75, 04, 6 re bushel, another third part in barley, at 3s. 114d, per bushel, and the remaining third part in oats, at 2s. 9d. per bushel. The amount in money to be paid for the future, in respect of the rent-charge, consists of the value of such respective quantities of wheat, barley, and oats, at the average prices per bushel which govern the payments for the particular year. It is also to be observed, that the payments in respect of rent-charge take place half-yearly.

Wales, may agree to fix the gross amount of rent-charge to be paid for the future in lieu of the tithes* of such parish. Should they fail to do so, the commissioners appointed to carry the act into execution; will effect the same object by means of a compulsory award.

This gross rent-charge is afterwards to be apportioned by means of valuers selected by the parties themselves, or by the tithe commissioners, amongst all the titheable lands in the parish to which it applies;

^{*} An exception, however, prevails in regard to the tithes of fish and minerals, and also to personal tithes, none of which can be commuted, except by special agreement. Easter offerings, mortuaries, and surplice frees, throughout any parish, may likewise be specially commuted. When, therefore, throughout these pages the tithes of a parish are referred to, the words are to be understood with these restrictions.

[†] The commissioners may delegate, with a few exceptions, the whole of the powers conferred upon them to any one of their assistant commissioners; and thus it happens in practice that a compulsory award is invariably made through the agency of an assistant.

and the instrument by which this distribution is effected is by the tithe act called an "Apportionment."

The gross rent-charge for each parish is founded upon the basis of the average annual receipts of the tithe-owner during the seven years preceding Christmas 1835, subject to increase or diminution to the extent of 20 per cent. As a general rule, therefore, the rent-charge will be high or low throughout any entire parish, as the accidental circumstances occurring within this period may have tended to increase or lessen the payments made on account of tithes.

But it is to be observed, that the apportioning of the rent-charge amongst the lands of a parish usually proceeds upon different principles. The portion with which each person's estate is to be charged will depend not merely upon the titheable produce of his lands, and consequent payments to the tithe-owner, during the seven years of average, but also upon the actual productive quality of the soil.* Hence it will follow, that the amount of rent-charge on one property will be high or low in regard to another; not, as is popularly supposed, in proportion to the rentable value of each, but according to the amount of the titheable produce, which each has been and is capable of yielding.

When a draft of any apportionment has been made, a copy of it is deposited for public inspection within the parish to which it relates. Every landowner who may deem the amount charged upon his lands excessive, or has any other reason for objecting to the apportionment, may then appeal against it before an assistant tithe commissioner, who is specially sent into the parish to adju-

^{*} The landowners possess a power of substituting other principles for the guidance of the valuer in making his apportionment; but in practice, this power trenches very little upon the principles of apportionment here expressed, which are those laid down by the act.

dicate thereon, and who will determine the several amounts of rent-charge. After this has been done, the draft apportionment is engrossed on parchment, and confirmed by the tithe commissioners. Two copies of the confirmed instrument of apportionment are then made, and sealed with the seal of the commissioners, one of which is deposited within the parish, and the other is lodged in the registry of the diocese in which the parish is situated. The confirmed instrument of apportionment, or either of the sealed copies, is thereupon to be deemed satisfactory evidence of the matters to which it relates.

The importance of the instrument of apportionment must therefore be obvious, since it constitutes the title of the titheowner to his rent-charge, and in it the landowner sees at once the amount to which his land is rendered liable. Upon this instrument will depend in a great measure the future law in respect of tithes. It is directed by the tithe act that in addition to fixing the gross rent-charge, the agreement or award, or some schedule to be annexed thereto, shall contain a statement of the quantity of the titheable lands in the parish, together with the particulars of their state of cultivation, and of any absolute or partial exemption from payment of tithes in kind, to which any lands may be liable. Where there are more titheowners than one in a parish, the agreement or award is also to state the amount of the gross rent-charge payable to each of them.

Upon this agreement or award is founded the apportionment.

Although the principal object of all apportionments is the same, consisting in the distribution of the gross rent-charge over the lands of a parish, yet the latitude permitted by the Tithe Commutation Act, and the convenience of individuals, have caused this object to be effected in divers ways. There are indeed certain leading principles to be followed in the construction of every apportionment, which can on no account be dispensed with; still the causes just mentioned, and other collateral objects which the tithe act permits also to be effected by means of the apportionment, have given rise to variations in the form of that instrument, and in some cases materially alter its substance.

The 55th section of the Tithe Commutation Act, which regulates the manner in which the apportionment is to be framed, directs that it shall set forth the agreement or award upon which such apportionment shall be founded, and every schedule thereunto annexed. It further directs that the apportionment shall state the name or description, and the true or estimated quantity in statute measure of the several lands to be comprised therein, with the particulars of their state of cultivation, and the names of their several proprietors and occupiers; and that it shall

refer by a number set against the description of such lands to a map to be annexed thereto, which shall contain the representation of such lands, marked with the same number; and, lastly, that it shall state the amount charged on the said several lands, and to whom and in what right the same shall be payable.

The various particulars here enumerated as essential to apportionments, are of such importance as to require some further attention.

The apportionment commences with the insertion of a copy of the agreement or award, and its schedules, together with the formal recitals of the confirmation of the agreement or award, and the appointment of a valuer to apportion the rent-charge. The remainder of its detail is comprised in a tabular form, under seven distinct heads, which are most conveniently arranged in the following order:—

- Names of landowners.
- 2. Names of occupiers.
- Numbers referring to the plan.
- Names and descriptions of lands and premises.
- 5. State of cultivation.
- 6. Quantities of land in statute measure.

 7. Amount of rout shares apportioned
- Amount of rent-charge apportioned thereon, and to whom payable.

By the Tithe Amendment Act of 1837, the state of cultivation may be omitted in voluntary apportionments, founded on agreements, where three fourths of the landowners interested sign a requisition to the commissioners to dispense with such statement. With this single exception, the tabular form here described is invariably pursued in all apportionments.

To each apportionment is also annexed a map or plan, containing a representation of the lands of the parish, and numbers thereon, corresponding with those used in the apportionment.

In some instances the contents of each particular field are set out separately in the apportionment, and represented on the map; and in others the gross contents of each landowner's whole estate, or of each tenant's occupation, are set out in a single quantity in the apportionment, and delineated by a mere outline boundary on the map. In the former instances, the rentcharge may be apportioned in a gross sum on the total contents of each estate or occupation; or it may be distributed over each individual field. Where the map accompanying the apportionment can be relied upon for accuracy, the rent-charge may likewise be distributed over any quantity of land, by an equal rate per acre. In the latter instances the rent-charge can only be apportioned in a gross sum upon each estate or occupation.

With reference to the particular persons to whom, and in what right, the several amounts of rent-charge fixed by any apportionment are payable, it is to be observed, that, throughout a majority of parishes, the whole rent-charge in lieu of both great and small tithes is payable solely to the ecclesiastical rector. In numerous other parishes the vicar has a rent-charge, in lieu of all the small tithes, and a lay or spiritual rector another rent-charge, in lieu of all the great tithes. It occasionally happens that three or more distinct rent-charges are payable throughout an entire parish, to as many individual titheowners. The reason for this is obvious : ecclesiastical tithe-owners in former times, and lay tithe-owners since the original transfer of impropriations into their hands, have been at liberty to subdivide the whole of the tithes of a parish into as many parts as there were titheable articles. Thus it sometimes happens, that the tithes of corn and grain of a parish belong to one person, the tithe of hay to a second, and all the small tithes to a third; consequently, if the

principles of apportioning laid down by the tithe act be strictly pursued, a single parcel of land may occasionally have three distinct rent-charges fixed upon it, as in the instance of a particular field in a transition state from meadow to arable. Here the owner of the corn and grain tithes would be entitled to a rent-charge in respect of corn; the owner of the small tithes to a second in respect of the green crops; and the owner of the hay tithe to a third in respect of the hay which had been produced, and might be produced again. In other cases, the tithes of lambs and wool, of geese, of pigs, or even of eggs, throughout a parish, are exclusively payable to a distinct tithe-owner.

These instances, however, except as regard tithe of hay, are rare; and when they happen, the parties interested may instruct the valuer not to fix more than two rent-charges upon any separate portion of land. The chief objection to apportioning

several distinct rent-charges on the same land, in lieu of the tithes of as many different articles of produce, lies in the heavy expense of collection to the several titheowners. No difficulty could arise from the form of the apportionment, since it shows on a single line the several rent-charges payable to each tithe-owner out of the same land, whatever may be their number; it being an invariable rule in the construction of apportionments, that the same land shall never be twice inserted.

A much more common case than the preceding is, where the whole or part of the tithes of a parish are owned by the several persons who are also owners of the land. In practice it has been usual to regard such lands as tithe-free; but this unity of possession was never available in law, so to blend the tithes with the land that they could not be dissevered. Such tithes must consequently be deemed still existing, and they must either be com-

muted for a rent-charge payable to the landowner himself, or, if he have a sufficient estate in the tithes, he may now for the first time under the several tithe commutation acts extinguish them altogether by merging them in the freehold. The effect of this power of merger will presently be explained.

In parishes where there are several titheowners entitled to the tithes of distinct lands, and no exemption from tithe is claimed, but the particular lands which ought to pay tithes to each tithe-owner cannot be ascertained, and also in cases where lands paying tithes to different tithe-owners lie dispersedly over the parish, the parties may themselves agree, or the tithe commissioners may by their award determine to charge the amount of rent-charge payable to each tithe-owner upon such lands as may be found most convenient, without reference to the circumstance whether he previously possessed the tithes of those particular lands; taking care, however, that no lands are charged with more than their due proportion of rent-charge. It will thus sometimes happen that a landowner may have to pay rent-charge to a different person from the one to whom he has previously paid tithes.

Although the main object of the Tithe Commutation Act is to enable every landowner to cultivate his land in the manner he may deem most advantageous, without being rendered liable to any increased burden in the shape of tithes; yet, in opposition to this, some relies of the ancient tithe system are still allowed to exist, in regard to particular classes of produce.

This evasion of the great principle pervading the whole scheme of tithe commutation was sanctioned by the legislature, in compliance with the representations of the hop growers and market gardeners in the counties surrounding the metropolis.

^{*} Throughout the midland counties the tithe of

These parties complained that if their lands were to be permanently charged with the yearly payments made to the tithe-owner during the seven years of average, the commutation might amount to a forfeiture of their property, if under a different state of cultivation; or if other parishes burdened with a less amount of tithe rent-charge were permitted to compete with them.

Hence it was provided by the Tithe Commutation Act of 1836, that lands cultivated as hop grounds or market gardens, at the time of commuting their tithes, should, upon their ceasing to be so cultivated, become liable to a certain reduction in the amount of rent-charge imposed upon them; and, on the other hand, that lands newly brought into cultivation, as hop grounds or market gardens, should for the future be subject to an additional amount of rent-charge be-

hops has seldom exceeded in amount the ordinary arable tithe of the district, and the parties interested frequently object to an extraordinary charge. yond that which they would otherwise have borne.

This is effected by fixing what the act calls an ordinary and extraordinary charge on all such lands. The principle of making the amount of rent-charge vary with the change of cultivation having thus been admitted, it was further extended by the Tithe Amendment Act of 1839, to lands cultivated as orchards and fruit plantations. As this last act modifies in other respects the provisions of the former, with reference to this subject, it will be the most satisfactory course to omit the details of each, and to state the general effect of the existing law.

In the course of the proceedings preliminary to making a compulsory award, the owner of any lands in the parish, which may be cultivated as hop grounds, market gardens, or orchards, may give notice to the assistant commissioner making the award, to value separately the tithes of such lands. The assistant commissioner will thereupon estimate the value of such tithes, and fix a rent-charge in respect thereof, having regard to the general amount of compositions for such tithes which he shall find to have prevailed in other parishes of a similar description, and not merely to the money payments in the parish under consideration, or the value of the tithes in kind therein. The value so estimated he will add to the value of the other tithes of the parish, found in the usual manner, and the total will form the gross rent-charge.

In commutations by voluntary agreement, the parties make their own bargain; but the gross rent-charge always includes the amount for the full tithes of all classes of produce.

The assistant commissioner will also, by his award, declare the whole parish, or such parts thereof as he may find convenient, to be one or more districts for the cultivation of such of the excepted classes of produce, the tithes of which he has separately valued.

Throughout each of these districts a single amount of additional rent-charge per acre will prevail, in respect of the particular class of produce for which the district has been constituted.

But the more important part of the proceedings with reference to these excepted classes of produce, remains to be accomplished by means of the apportionment.

In all cases where a district has been assigned for the cultivation of lands, as hop grounds or market gardens; and in respect to lands cultivated as orchards and fruit plantations, in cases where three fourths of the owners of such lands give notice to the valuer making the apportionment, the rent-charge is subjected to variation with the change of cultivation.

For this purpose the amount of rentcharge apportioned upon lands cultivated as hop grounds, market gardens, orchards, or fruit plantations, is to be distinguished into two parts, called the ordinary and the extraordinary charge; the division of the amount of rent-charge into ordinary and extraordinary being exclusively within the discretion of the valuer making the apportionment.

The ordinary charge is that particular portion of the amount which is imposed upon the lands on the assumption of their being cultivated in the ordinary manner, as arable or pasture, and will be permanent amidst all changes of cultivation. The extraordinary charge is a uniform rate per acre throughout the district to which it applies, and is apportioned in addition to the ordinary charge upon the particular lands yielding the class of produce in respect of which the district has been assigned. When these lands cease to be cultivated in the manner which gives rise to the extraordinary charge, they will be released from any further payment on that account,

and rendered liable to the ordinary rentcharge alone. On the other hand, all lands within a district which shall be newly cultivated after the commutation, in any manner which gives rise to the extraordinary charge there existing, will be subject thereto during such cultivation. It is possible that a parish may be divided into several districts, each of which may be subject to several rates of extraordinary charge; but it is to be observed that only one rate of extraordinary charge throughout an entire district can prevail in respect of a single class of produce.

Should lands be hereafter cultivated as hop grounds or market gardens beyond the limits of any district in which an extraordinary charge has been declared, the tithe commissioners, upon the request of any party interested, are to fix an additional rent-charge by way of extraordinary charge upon such lands. In respect of orchards and fruit plantations, however,

unless an extraordinary charge shall have been declared at the time of commutation, none can ever afterwards be imposed.

The several cases in which lands may be partially or absolutely exempted from the payment of tithe rent-charge also require to be noticed.

Glebe lands, and lands formerly parcel of the possessions of any privileged order, which paid no tithes when in the manurance of the owners, are entitled to the like exemption from payment of rent-charge; or the parties in the latter instance may agree to the payment of a fixed and continuing rent-charge, without regard to the change of occupation or manurance.

In cases, also, of lands held by the crown which have been hitherto tithe-free, while in the occupation of the sovereign, his lessees, or tenants, but which would become subject to tithes upon alienation, and when owned by a subject, the ancient exemption will hold good, unless the parties interested choose to substitute by agreement a fixed instead of a contingent rent-charge upon such lands partially exempt.

There are other cases in which lands enjoy either a total or partial exemption, dependent on their occupation by a resident or nonresident in the parish, in which an unvarying rent-charge may be fixed, without regard to the occupation conferring the privilege.

Lands covered from the render of tithes in kind by the payment of a specific modus, have the amount of the modus charged upon them as rent-charge in the apportionment. Such amount may, however, be subject to a slight increase, in case of Easter offerings, mortuaries, or surplice fees being commuted, and the landowner having no other lands in the parish but those covered by the modus.

The foregoing are the principal exemptions which result from the previously existing law of tithes; but there are also certain classes of exemption which arise exclusively out of the provisions of the tithe commutation acts.

The landowners of a parish, on the appointment of a valuer to apportion the rentcharge, frequently give him instructions not to charge any part of the amount upon cottage gardens, which are thus altogether released from any further payment on account of tithes.

By sect. 58. of the tithe act, any landowner may charge the whole amount, or any portion of the rent-charge intended to be apportioned upon the whole of his lands held under the same title, and for the same estate, specially upon a part only of such lands in the same parish, provided that the amount of rent-charge apportioned upon any part of such lands is not more than one third of their yearly value. By this means, the lands released from rent-charge become equivalent to lands formerly tithe-free, with the single exception which will hereafter be adverted to.

This is a power, however, which has not hitherto been much resorted to in practice; but, as its exercise must be often convenient on the transfer of land, and the mode of putting it into execution is simple, there is reason to believe that a recurrence to it will hereafter be of frequent necessity. After the apportionment has once been confirmed by the tithe commissioners, any alteration of this kind is to be made by three commissioners of land-tax, with the consent of two justices of the peace for the county in which the parish is situated.

In cases also of unenclosed commons apurtenant to estates, and which have hitherto produced tithes of geese, wool and lambs, and other mixed tithes, it has been found necessary to apportion the whole rent-charge exclusively upon the enclosed lands, in consequence of the difficulties which the tithe-owner would have in col-

lecting his rent-charge from such open lands, in which numerous parties have concurrent rights.

When these commons are enclosed and brought into cultivation, they will be altogether released from rent-charge, except in the rare instance where the enclosed lands to which they were appurtenant do not alone form a sufficient security to the tithe owner for his rent-charge.*

Another important subject resulting from the tithe acts is that of merger. By the act of 1836, owners of tithes or tithe rentcharges in fee-simple or fee-tail, are enabled to merge the same in the freehold of the land from which they accrued, by which means such tithes or rent-charge would become extinguished, without the possi-

^{*} Our limits will not allow more than a mere reference to the peculiarities attending the apportionment of the rent-charge, in lieu of the tithes of Lammas lands and rights of common in gross.

bility of being ever revived. By the two tithe amendment acts, and particularly by the merger act which was passed in 1838, this original power to merge has been greatly extended, so that now persons possessing only life-estates in lands, and tithes or tithe rent-charges settled to the same uses, may merge the same.

But the tithe commutation acts afford further facilities unknown to the previous law for extinguishing tithes and tithe rentcharges.

Land to an extent not exceeding 20 acres in any parish, may be given to the ecclesiastical tithe-owner by any landowner, in lieu of the whole or any equivalent part of the rent-charge apportioned upon his lands; and upon the transfer of such land to the tithe-owner, the rent-charge in lieu of which it was given becomes extinguished.*

^{*} It is scarcely necessary to notice the power to extinguish part of the tithes of a parish, by means of

There appears, however, to be a distinction of some importance between the limit of the exemption, in regard to commonable lands, or lands released from rent-charge by means of a special apportionment, and lands, the tithes of which have been merged or exchanged for land.

In the first two cases, the lands released from rent-charge would still, it is presumed, be subject to the extraordinary acreable charge of the district in which they are situated, should they ever afterwards be cultivated as hop or fruit grounds. If this were not the case, every landowner would have it in his power to fix the rentcharge affecting the whole of his lands upon such part of them as was not adapted to the cultivation of hops or fruit, and thus to de-

a parochial agreement for giving land, by the whole body of the landowners; in such a manner that each shall derive proportionate benefit, by a diminution of the rent-charge; inasmuch as no such agreement has been or is likely to be made.

prive the tithe-owner of the extraordinary charge altogether.

When the whole of the tithes of any lands are merged, or even where the small tithes only are merged (inasmuch as hops and fruit are comprised under the description of small tithes), no extraordinary charge could accrue in respect of such lands. The same remark applies to lands the tithes of which have been extinguished by virtue of land given in exchange. Lands also covered by moduses, in lieu either of all tithes or of small tithes only, would be exempted from any extraordinary charge.

A regard to these circumstances of exemption from extraordinary charge has rendered apportionments more elaborate and complicated than they otherwise would have been, since it is necessary to shove clearly in them what particular lands are exempt from payment of small tithes altogether, or are relieved from the payment of such tithes in kind by moduses; and this even where there is but one tithe-owner, and great tithes in kind are payable to him out of the same lands.

The last point of view, in which the subject of tithe rent-charge apportionments claims attention, is in its effect upon the relation subsisting between landlord and tenant.

Any tenant at rackrent under an existing lease, who shall be dissatisfied with the
amount of rent-charge apportioned upon
the lands held by him, may, within one
month after the confirmation of the apportionment, give notice to his landlord,
that he dissents from being bound to pay
such rent-charge. The landlord will then
stand in regard to such tenant in the place
of the tithe-owner, and will be entitled to
take the tithes in kind during the continuance of the lease. This, however, is
not likely to occur often in practice, as it
will generally be more beneficial to the
tenant to pay the rent-charge than to sub-

ject his land again to the burden of tithes in kind.

In the instances where, by means of a special apportionment of the rent-charge, a landlord has charged the amount payable by him in respect of all his lands in a parish exclusively upon a part of them, held by one tenant, in particular, such tennant should invariably give the necessary notice to his landlord, and an arrangement would probably take place between them satisfactory to both. Should the tenant omit to give notice, inasmuch as there is no provision in the tithe acts to meet the justice of the case, he might be driven to the precarious remedy of a suit in equity, to gain relief against his landlord. The same remarks apply when the rent-charge in respect of all the lands of a landowner is apportioned by a single rate per acre over lands of a different quality. Here also the tenant of the inferior lands should give notice, that he will not be bound to pay the rent-charge;

and he should be cautiously upon his guard against this mode of apportionment, as there is upon its surface an appearance of fairness, which he may find to be fallacious when it is too late.

The tithe act provides that, after the apportionment for a parish has been confirmed, the owner of any lands therein shall, in all future cases of tenancy, allow to his tenant out of the rent all sums paid by the latter on account of rent-charge, except it be specially agreed between them to the contrary.

When therefore a tenant stipulates to pay the rent-charge in addition to his rent, it becomes him very seriously to consider the nature and amount of the liability to which he will be subject. Besides what has just been stated with respect to tenants holding under existing lesses, there are other circumstances which will require his attention. In case of any failure to pay the tithe rentcharge, the compulsory means of enforcing payment provided by the tithe act are much more efficient than previously existed in cases of failure to set out tithes, or pay a tithe composition.

When the rent-charge apportioned on any lands is in arrear, and unpaid for the space of twenty-one days after any halfyearly day of payment, the tithe-owner may distrain for the same upon giving ten days' previous notice to the tenant in possession. If there be no sufficient distress upon the premises, and the rent-charge due is forty days in arrear, the tithe-owner is by a very summary process put into possession of the lands, to hold the same until the arrears of rent-charge are paid. It is to be observed, too, that these powers of distress and entry extend not merely to the individual lands of which the rent-charge is so in arrear, but to all other lands in the same parish held by the tenant making failure in the payment, and owned by the same landlord or by the tenant himself.

Another distinction between the payments in respect of tithe compositions previous to the commutation and tithe rentcharges, is that the latter do not constitute a personal obligation. The land, and not the person of the landholder, is liable for the payment of tithe rent-charge to the titheowner. When, therefore, a tenant quits his farm, leaving arrears of rent-charge unpaid, the tithe-owner has no means of enforcing his claim against such tenant. Hence it becomes every new tenant entering upon an estate, to see that no arrears of rent-charge are outstanding, or his effects will become liable to the payment in the first instance, and if the terms of the lease be that the tenant shall pay the rent-charge he will be left to the uncertainty of recovering the amount from the off-going tenant

Every tenant is also liable, to the extent of the whole rent-charge apportioned upon his lands, to the payment of the rates in respect of the whole rent-charge for the parish, in case the same are not paid when due by the tithe-owner; but the tenant is entitled to deduct all sums paid on this account from the amount of future rent-charge which he would otherwise have to pay.

When it is considered how large a proportion of the tithes of the kingdom is in the possession of laymen, and of spiritual and lay corporations possessing the lands out of which the tithes issue, and consequently capable of merging them, - that common lands are almost invariably excluded from bearing any portion of the rent-charge, and that a power, moreover, exists for the ecclesiastical tithe-owner in every parish to dispose of tithes in exchange for land to the extent of twenty acres, - it will perhaps be hardly too much to anticipate, that, before very many years have elapsed, nearly one half of the tithes in existence at the commencement of the commutation will, instead of being merely converted to rent-charge, be absolutely and for ever extinguished.

With respect to the rent-charges which are to exist as a permanent encumbrance upon the land, it cannot be disguised that the principle of apportioning them according to the average titheable produce and productive quality of the land, is one which may occasionally affect the value of existing interests in landed property; since the future payment in lieu of tithes must necessarily fall heavier in districts comprising a large proportion of arable land of an inferior class, than in others chiefly consisting of pasture. But it is necessary that this principle should be kept in view, in order to prevent misconceptions which would lead to ultimate disappointment. It is a consequence of all comprehensive measures that they must press unequally in some individual instances; and the difficulties to be surmounted in the particular measure of tithe commutation

were immense. In a few cases only, where particular classes of produce, requiring a large amount of capital for their cultivation, have swelled the tithe-owner's receipts to such an extent that the perpetuating of them undiminished in the shape of rentcharge would be tantamount to divesting the landholder of his estate, the legislature has deemed it right to afford him a partial relief.

Nor should landholders overlook the circumstances in which the tithe act deals less leniently with them than the ancient law.

Under the system of tithes the landholder knew at once that the tenth part of his produce, whatever it might be, was the utmost that could be exacted; and as a prudent man he would form his calculations upon that basis. He possessed the power of diminishing to a great extent the titheowner's receipts, by a change in the cultivation of his farm; if his crops were scanty, the burden in the shape of tithes would be less; if they were abundant, he could the better afford to pay the tithe-owner liberally. Should his land have yielded no titheable produce, of course no tithes could be demanded.

But these considerations must now yield to others of a distinct character. The tithe rent-charge, until it becomes greater than the whole profits of the land, whether those profits arise from building or otherwise, must at all events be paid. No misfortune of the seasons, no sterility of soil, no conversion of the land to purposes foreign to husbandry; in short, nothing less than the physical destruction of the land itself by some calamity of nature, can discharge or impair this liability.

Yet, on a comparison of the two systems, it will be found that the landholder derives greatly preponderating advantages from the commutation. He will for the future possess the assurance, that every application of his capital, skill, and industry, to the raising of an increased produce, will tend exclusively to his own profit.

Though the fixed and certain rentcharge may chance to press heavily upon him in some peculiarly unfavourable season, vet in the ordinary course of events he will have provided for its payment, and will enjoy the satisfaction of gathering the fruits of his labours, without molestation. Amidst the progressive improvements which are daily taking place in agricultural science, it is to the landholder chiefly that the future advantage will accrue. verting barren heath and waste ground into productive land, the harvest will be entirely his own, relieved from the heartburnings and litigation with which such conversions have hitherto so often been accompanied.

Nor, though less prominent, are the advantages slight which the tithe-owner de-

rives from the commutation. The clergy, in particular, whose claims as tithe-owners exceed those of all others, as much in importance as in amount, will enjoy a security for their income which none of them before could individually have possessed. They have no longer to fear pecuniary loss or ruin from the fluctuations of seasons, the malevolence of landowners, or the dishonesty or insolvency of tenants. Those collisions of interest, which were constantly exciting feelings of animosity between the incumbent and his parishioners, will, it is hoped, be succeeded by harmony and contentment.

We may appreciate the excellence of that elastic property of tithes, which has adapted them for supporting a ministry commensurate with the increasing wants of the community, whilst we decry the evils inherent to the system. But we should never forget that the tendency of that system has been to perpetuate a state of petty civil war in every parish of the kingdom.

XIII.

Form of an Appraisement.

An appraisement of the tillages, half-tillages, manure, corn hay, straw, two stone troughs, pump, and two ladders, in and upon a farm situate at A—, containing 44 acres, 2 roods, 10 poles, in the occupation of B—C—, made to the landlord D—E—, or to his on-coming tenant, F—G—, this 29th day of September, 1843, which, after deducting dilapidations, amounts to the sum of four hundred and seven pounds seventeen shillings and nine-pence.

Note. — This valuation would require an appraisement stamp of 15s.

When the valuation is discharged, a receipt may be given for the amount on the same paper, without any additional stamp.

Law respecting Appraisers.

Persons appraising property for hire to be deemed Appraisers, who must take out an annual licence, under the penalty of 50*l*, which commences on the 6th of July. Auctioneers duly authorized may act as appraisers without any further licence.

Penalty on neglecting to insert any valuation on a proper stamp, 50l.

Penalty on any person receiving any appraisement without a stamp, 20l.

Appraisers charge $2\frac{1}{2}$ per cent. on the amount of the valuation, besides personal expenses paid them in other cases. Five guineas a day is taken for the time engaged in the valuation, which includes all extra expenses, but not the stamp. These charges will vary something in different districts.

Stamps.

Appraisements, or valuation of any estates or effects, real or personal, or of an interest therein; or of the annual value thereof; or of any dilapidations; or of any repairs wanted; or of the materials and labour used and to be used in any buildings; or of any artificer's work whatever. Any valuation or appraisement on vellum, parchment, or paper, where the amount shall not exceed

£50 £0 £0 £0 2 6

exceed		200	~0	24	U
Exceeding £50 100 200 500	(E &)	$100 \\ 200 \\ 500 \\ 1000$	0 0 0 1	10 15	0
) a (

Exemptions. — Appraisements in any courts of Admiralty; or appraisements made for ascertaining the legacy duty.

A Table of English Lineal Measure.

Inches. 7.92	1 link.						
12	117	1 foot.					
36	45	3	1 yard.				
198	25	161	51	1 pole.			
792	100	66	22	4	Ichain.		
7920	1000	660	220	40	10	1 farl.	
63360	8000	5280	1760	320	80	8	1 mile.

A pole, perch, and rod, are the same measure.

An acre in length is 28 yards.

A rood in ditto is 7 yards; in some places 6, and $5\frac{1}{2}$ yards.

A Table of Square Measure.

9 feet.	1 yard.				
2721	301	1perch.			
4356	484	16	Ichain.		
10890	1210	40	21	1 rood.	
43560	4840	160	10	4	1 acre.

A pole and perch are the same measure.

144 square inches make one square foot.

1 square chain is the tenth part of an acre.

4840 square yards one English acre.

6150 square yards one Scotch acre.

The Scotch chain measures 24.8 English yards.

The Scotch acre is equal to 14 English.

XIV. •

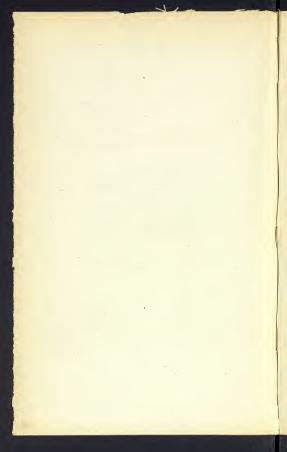
FORMS OF ACCOMPT BOOKS.

	3 \	
-		

Thursday.	Friday.	Saturday.	Rate per day.	£	8.	
[The weekly the payments a book, is entered	or monthly am are made in thi	ount, according as s separate labour ount]	-			
	,					

Di 1844.	. General Casi	h Accoun	t.		
Date.	. ,	LedgerFolio.	£	s.	d.
Date. Nov. 1. 20. 23.	To cash of Mr. A. B., corn-factor, for ten quarters of wheat, at 60s. To cash for ten pigs, at 20s. each. To cash for one mare sold To cash for four oxen, at 12t. each. To cash for 500 hogs, at 30s. each,	3 & 4. & 15. 12 & 4. 9 & 4. 10 & 4.	30 10 22 48 300	0 0 0 0 0	0 0 0 0 0 0

1844.	Contr	a.		Cr.			
Date.		Ledger Folio.	£	8.	d.		
June 8.	By eash paid for four pigs, at 8s. each [This cash book contains over some paid or received over some paid or received over some paid or received over the property of the pr	12 & 4.	1	12	0		



FARM LEDGER.

				In	dex.				
	A.			Folio.		G.			Folio.
					Granary	-	-	-	3
	В.	_				Н.			
Barn	-	-	-	2	Horses	-	-		9
	C.		Taranta a		-	I.			
Cash Cattle	-	-		4 10					
	D.	-				K.			
	E.					L.			
Expense	es (petty)	-	6					
	F.					M.			
					Manure	-	-	-	7

	In	dex.	
Ň.	Folio.	T.	Folio.
0.		U.	
P.		v.	
Q.		w.	
R.		X.	
		,	
S.		Y. Z.	
			-

1 <i>I</i> 1844.	r.	R	ick Y	ard.				
Date.	Folio.		Wheat.	Barley. Ricks.	Oats.	Rye.	Beans.	Pease Ricks
Oct.		To crop 1843	6	5	8	1	2	3

1844.			Contr	a.				Cr.
Date.	Folio.		Wheat,	Barley.	Oats.	Rye.	Beans.	Peas Rick
et. 10. 16.	2 2	By barn - By do	1 1		1			
		[The balance of this account will show at any time the number of ricks un- threshed.]						

				Wh	eat.	Bar	ley.	Oa	ts.	R	ye.	Be	ans.	Pe	ase
Date.	Folio.			Quarters.	Bushels.										
Oct. 10. 16.	1	To rick yard To do	-	12 20	1			25							

	1		W	ent.	Bar	rley.	Oa	ts.	R	ye.	Be	8D5.	Pe	
Date.	Folio.		Quarters.	Bushels.	Quarters.	Bushels.	Quarters.	Bushela.		-	_	_	-	
Oct. 17. Nov. 5.		By granary - By seed sown -	12 20				25							
		[The balance of this account will show at any time the quantity of grain in the barn; and, also, the whole account of the crop. A money co- lumn may be add- ed here.]												
										1				

				Wh	eat.	Bar	ley.	Oa	ts.	Ry	re.	Bei	nns.	Pe	190.
Date	Folio.			Quarters.	Bushelt.	Quarters.	Bushels.	Quarters.	Bushels.	Quarters.	Bushels.	Quarters.	Busbels.	Quarters.	Bushels.
Oct. 17.	2	To barn	-	12	1			25	6						
												The state of the s			
				TOTAL TELEVISION OF THE PERSON											

1844.		C	on	tra									Ci	٠.
			Wh	eat.	Bar	ley.	Oa	ts.	R	re.	Bea	ins.	Pe	asc
Date.	Folio.		Quarters.	Bushels.	Quarters.	Bushells,	Quarters.	Bushels.	Quarters.	Bushels.	Quarters.	Bushels.	Quarters.	Buchele.
Nov. 1.	4 & 15	By A. B., corn- factor, at 60s. per quarter - By farm horses	10				5							
	13	By A. B., farm servant		4										
28.	14	By manor sta- bles					10							
		[The balance of this account will show the disposal of the grain, and the quantity on hand. A money co- lumn may be add- ed.]												

Date.	Folio.		Æ	ε.	d.
Nov. 1. 20. 23.	3 & 15 12 9 10 11	To Mr. A. B., for wheat, 10 qrs. at 60s. To cash for pigs To cash for one mare To cash for oxen To cash for sheep To cash for sheep	30 10 22 48 300	0 0 0 0	0 0 0 0 0

1844.		Contra.			Cr.
Date.	Folio.		£	s.	d.
June 8.	12	By cash for 4 pigs, at 8s. each [The balance of this account will show the profit or loss, and must agree with the balance of the general cash book of particulars.]	1	12	0

Date.	Folio.		£	s	d.
Dec. 10.		By weekly bill from labour book By A. B., for 8 days, at 2s.	6 0	7 16	0
		[This account comprehends all sums paid for labour, and shows the expenses of cultivation, and may be carried to the cash account quarterly, half yearly, or yearly.]			

Date.	Folio.		£	s.	d.
Oct. 1. 16.		By one day at market - By tolls for earts with grain -	0 0	3 1	64
		[The amount of this account will be carried to the cash column at the end of the year.]			

Date.	Folio.		£	s.	d.
Nov. 7.		By cash paid D. F., for 10 loads, at 4s.	2	0	0
		[This column will show the amount paid for manures without referring to the general cash account, and will be carried to it at the end of the year.]			

8 Loss on Stock of any Kind and Value.

Date.	Folio.		Horses.	Cattle.	Sheep.	Pigs.	£	ε.	a.
Nov. 10. 18.	9 11	By death By death	1		1		26	0 18	00
		[This column may contain all losses, and also deteriora- tions; and an esti- mate may be formed yearly of loss by tear and wear and casualties.]							

Date.	Folio.		Horses.	Mares.	Foals.	£	8.	a
		To stock on farm -	16	3	1			

	Contro	τ.				C_{7}	٠.
Follo.		Horses.	Mares.	Foals.	£	s.	6
8 4	By death By sale	1	1		26 22	0 0	00
	[This column shows the stock on hand, and the sums received and paid for horses.]						
			-				
	8 4	8 By death	8 By death - 1 4 By sale - 1	8 By death - 1 1 By sale - 1 1	8 By death - 1 1 1 1 (This column shows the stock on hand, and the stock on hand, and	8 By death - 1 266 4 By sale - 1 1 22 [This column shows the stock on hand, and	8 By death - 1 26 0 4 By sale - 1 1 22 0

Date.	Folio.		Bulls.	Cows.	Oxen.	Heifers.	Calves.	£	s.	d.
		To stock on farm -		14						
			1							
			ľ							
			1							
			1		ı	l				
			1							
			1							
			П							
			1							
		-								
			1							

10 1844.		Contra.							Cr	
Date.	Folio.		Bulls.	Cows.	Oxen.	Heifers.	Calves.	£	8.	d.
Nov. 23. 24.	14	By sale, at 12 <i>l</i> . each By one bullock to house			4			48 14	0 14	
		[This column shows the stock on hand, and the money received and paid.]								

ate.	Folio.		Tups.	Ewes.	Hogs.	Theaves.	Lambs.	£	s.	d.
		To stock on farm	6	400	160	200	300			

Date. Folio	s.	Tups.	Ewes.	Hogs.	Theaves.	Lambs.	£	s.	6
9	By sale at 30s. each By death -			200	1.		300		
	[This column shows the sums re- ceived and paid for sheep.]								

FARM LEDGER.

Date.	Folio.		Boars.	Sows.	Pigs.	£	s.	d.
une 8.	4	To stock on farm - To purchase, at 8s.	1	3	21 4	1	12	0

1844 Date.	Folio.		Boars.	Sows.	Pigs.	£	s.	d.
	4	By sale, at 20s. each			10	10	0	0

					Wh	eat.	Baa	ley.	0.	its.
Folto.		£	5.	d.	Quarters.	Bushels.	Quarters.	Bushels.	Quarters.	Bushels.
3	To cash on account - To granary	- 1	10	0		4				
		ì								

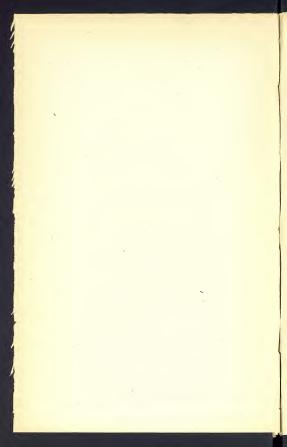
						W	eat.	Bar	ley.	O	ats.
Date.	Folio.		£	ε.	d.	Quarters.	Bushels.	Quarters.	Bushels.	Quarters.	Bushela.
		By one year's conditions	10	0	0	2		6		5	
		[This account is lerpt for yearly servants, and for partial payments. The grain must be valued and earried to the labour column. When the wages are weekly, the sum will appear in the weekly or an experiment of the sum will appear in the weekly of the sum will appear in the weekly of the sum will appear in the weekly of the sum of the sum of the sum of the weekly of the sum of the sum of the part transaction, as conston may require the sum of the particular to the sum of the particular to the sum of the particular to sum of the sum of					5				

							Hou	se.								Stal	bles.				G	arde	n.		
Date.	Folio.	Beef.	Mutton.	Pork.	Cheese.	Butter.	MIIK.	Poultry.	Eggs.	Price.				Hay.	Straw.	Oats.	Price.					Price.			
Nov. 24.	10			St.	St.	Lbs.	Qts.		Dog		i	14		Tons.	St.	Qrs					1 day of a cart	s. 10		10	
	3				4		40		4	6 1 3d	0 0	4 10	0 0			10	24	12	0	0					
																									-

1844		Contra.			Cr.
Date.	Folio.		£	s.	d.
		By eash on account	40	0	0
		[This account may be balanced yearly or half yearly, and the amount of each entered for produce sold.]			The second secon
			,		

Mr. A. B., Corn Factor, 15 Dr. 1844. Date. Folio. To 10 quarters of wheat, at 60s. per quarter - -Nov. 1. 3 30 0 .0

Date.	Polio.		£	ε.	
Nov. 1.	4	By cash	30	0	
		[Every such private transaction must have a separate account, to show at any time how effairs stand.]			
					ľ





	Pos	ses-						Cash							At	rea	urs.
Names of Farms.	80	nes.	Reut.	£	s.	d.	Date.	received.	£	s.	d.	£	8.	d.	£	s.	d
Newstead	Α.	в.	Money - Burdens (if any)				June 24. Dec. 27.	To half year's rent To ditto	150	0	0						
			,	300	0	0				ī	Т	800	0	0			
Grange.	E.	F.	Money - Burdens				June 24 Dec. 27.	To half year's rent To cash	90	0	0						
			(if any)	180	-	Н	Dec. 27.	10 cash	20	Ů					70	0	0
				П	Г					T							
	Т				Ī												
				RI													
						1											

1844.	Contra.								Cr	٠.
Date.	Expenses.	£	S.,	d.	£	s.	d.	£	8.	d.
Aug. 20.	By cash paid for repairs on Newstead farm, per bills	23	16	0	25	16	0	The same of the sa		
July 14.	By cash paid for draining and fencing on Grange farm	17	18	0	17	18	0		-	
	Total expenses on farms				H	H	-	41	14	0
	[This account may be enlarged to any extent, the balmec of the separate columns peases, and the account settled yearly, on this sheet.]				The state of the s	444				

Woods.			
	£	5.	d.
	į.		
	Woods.		

1844.	Contra.			Cr
Date.		£	г.	a.
	[All sums paid and received on the ac-			
	count of the woods and plantations are entered here, and the balance or whole sums carried to the respective columns of the general cash account.]			

An Account of the Names of Persons in the employment of weekly Labour, and Wages, for four Weeks, from the

No.	Names of Persons employed.	Business.	Wages per Day.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	An	mou We	mt oek.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Atper	mou We	nt ek.
			-	-	-	-	-	-	-	£	s.	d.		-	-	-	-	-	£	8.	d.
							ľ			-											
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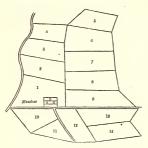
Monday	Monday.	Tuesday.	Wednesday	When other	Thursday	Friday.	Saturday.	p	Ai	moi W	00	k.	Monday.	Tuesday.	Wednesday	Thursday.	Delta.	Cottonday.	commund.	Aiper	mou W	mt sek.	Observations showing how and what Business each Person on ployed this Month.
									e	\$.		d.							The state of the s	£	4	d.	[Where anouthly detach bils are preferred to a bo of labour, this statement we answer, and the amount w be carried to the labour or column.]

D	r.		Dates.	Particulars of Sums received and paid.	Dec	C: ment	
£	s.	d.	Dates		£	5.	
				[This page forms a short and very neal statement without referring to the separate baseds in the Ledger Cash 1 cl., In some cases it may be neefal.]			

Every estate should be provided with a map on a large scale, and also with a book of maps, on which to mark any improvements suggested. A plan of each farm scparately, on a scale suited for a large pocket-book, may be made from the other, on the opposite page to the rotation book, as shown in the following sheet, and with the name of the farm attached, forming a convenient book of maps for field consultation. The rotation may be extended to any number of years, and may be made to suit any course of cropping. On small estates, the agent or person in charge of it, will examine each field on every farm twice in a year, -in the spring and in the end of autumn, and mark, in the proper column of the rotation book, the kind of crop the field has carried: on extensive concerns this duty will devolve on the manor bailiff, who must reside on the property. By means of this examination of the field, any deviation

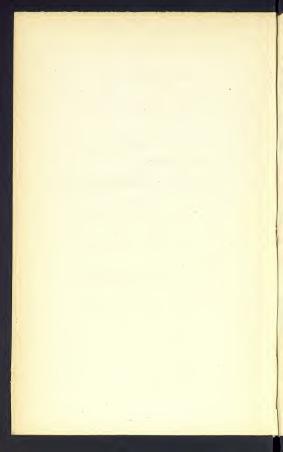
from the prescribed or good husbandry is immediately detected, and also if the yearly cultivation of the field be properly performed. Such a check would prevent quarrels and litigations about damages at the end of leases, on account of bad and scourging farming; and any landowner, by examining this book at home, is able to see the cropping of the whole estate without the trouble of inspection. Attention in these points would do much to introduce better cultivation; but great carelessness is almost every where evinced: very few proprietors either know or employ qualified men; and in no other art practised in our day, has a recommendation to office ever proceeded from a total ignorance of the art itself, and from being engaged in a profession totally and irreconcilably different. The consequences are quickly and amply evident, and must be certain.

Plan of Farm of 250 Acres in a mixed Rotation, with about 30 Acres in Permanent Meadow.



Fields.	1844.	1845,	1846.	1847.	1843.	1849.
No. 1. 2. 345555555555	Turnip Barley Clover Oats Barley Oats Clover	Clover Oats Turnip Clover Turnip Oats Barley Vet. Fall. Wheat	When	dunge	d.	

1850.	1851.	1852.	1853.	1854.	1855.	1856.	1857.
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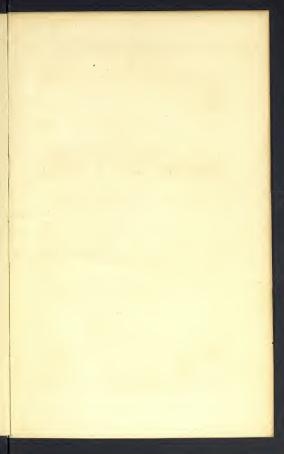
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